

A wide-angle photograph of an Antarctic landscape. The foreground shows dark, rocky terrain. Beyond it is a vast, flat expanse of snow and ice, leading to a range of snow-capped mountains in the distance under a clear blue sky.

Communicating Gateway Identity

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GCAS 08/09 GATEWAY ANTARCTICA

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Abstract

Fundamental aspects of Antarctic interpretation, the history of Antarctic arts, technology as applied to Antarctic communication, and the history of Antarctic celebrations and festivals are complex and very interesting fields. However, many of these have already been examined in seminal works elsewhere, such as Stephen J. Pyne's *The Ice* (1986), Paul Simpson-Housley's *Antarctica: Exploration, Perception, Metaphor* (1992), and recently, Lynne Andrews' *Antarctic Eye: The Visual Journey* (2007). While these have not exhausted the subject, this project instead seeks to consider these fields as they apply to New Zealand as an Antarctic Gateway nation, in the modern context of environmental awareness. *Communicating Gateway Identity* is particularly conceived in light of the future importance of Antarctica's role as a barometer of global warming and actor in climate change, and the need for means in which a growing sense of stewardship over the continent can be supported. Rationale for the support in particular of Antarctic arts and the New Zealand Antarctic Festival are also discussed, since technology is largely driven by individuals.



Fig. 1. In the atlas *Theatrum Orbis Terrarum*, published in 1570, Terra Australis extends north of the Tropic of Capricorn in the Pacific Ocean. This was drawn by the famous cartographer Abraham Ortelius (1527-1598). Source: The National Library of Australia.

Prologue: The Real-isation of Antarctica

As a continent of planetary extremes at the (cartographic) bottom of the world, Antarctica has a history of inspiring awe. But before the continent was sighted and mapped, Antarctica was a socially embedded theory, a figment of the popular imagination known as *Terra Australis Incognita* (unknown southern land).

The early Greeks possessed a sense of symmetry that told them there must be a southern continent to balance out the known landmasses of the northern hemisphere, leading to speculated depictions on maps from 1486 (Andrews, 2007). After the famed astronomer Edmond Halley published theories through the Royal Society that the earth was hollow and the centre possibly habitable, and philosophers subsequently planted the seed that perhaps access could be gained through the poles, the collective imagination was sparked.

Literary artists beginning with Robert Paltock (1751) and the aptly named Captain Adam Seaborn (a suspected pseudonym for John Cleves Symmes) (1820) added layers of colour with tales of lost races who lived within the hollow earth, fantastical subterranean

places and technology, and wild adventures undertaken in accidentally or deliberately going there.

Meanwhile, the layers of unlikelihood were peeled back as reality bit, with the voyages of Cook, whalers, sealers, and explorers progressively shrinking the area in which the hypothetical continent could exist. The continent of Antarctica was first sighted in only 1820.¹ Not that reality stopped the obsession with gothic hollow earth story-telling!

The human history of Antarctica the continent is thus very recent. Many nations have participated in its exploration and charting; the expeditions which are most relevant to New Zealand's evolving Antarctic Identity are briefly discussed in later sections.

The Development of Polar Research and Environmental Awareness

For scientists, the polar regions have proven to be unique vantage points for observing terrestrial and cosmic phenomena (CICERO, 2009). Antarctic science has flourished since International Geophysical Year (IGY) in 1957/58 and the negotiation of the Antarctic Treaty at the height of the Cold War in 1959.

The treaty provided a framework in which peaceful cooperation and freedom of science on the continent could be maintained, laying aside territorial claims (parties 'agreed to disagree'; Art. IV) and specifically designating the Antarctic (the area south of 60deg latitude; Art. VI) as an area for peaceful, not military, purposes (Art. I), with freedom of scientific investigation (Art. II) and information exchange (Art. III), where nuclear explosions and waste disposal are banned (Art. V), with processes for observation (Art. VII-VIII), regular meetings (Art. IX), and dispute resolution (Art. XI), in the interest of all mankind (Heap, 2007; ATS, 2009). Antarctica has since proven a successful political as well as scientific laboratory (Heap, 2007), with treaty membership growing to 46 nations, representing 88% of the earth's population, 34 of these being consultative (ATS, 2009).

¹ As to who made the first sighting, there is debate; it could have been either Bellingshausen (Russia), Bransfield (UK) or Palmer (US).

Polar research has likened Antarctica and the Arctic to barometers for the planet (Fickling, 2003; CICERO, 2009). Science now understands the poles are fragile places where biological, oceanographic and atmospheric processes are vulnerable to environmental change from anthropogenic influences (CICERO, 2009). The discovery by British Antarctic Survey (BAS) scientists that there was a massive hole in the ozone layer over Antarctica (Farman *et al.*, 1985; Fig. 2) had a significant impact on public awareness of the environmental consequences of our actions. An international agreement was promptly signed banned the use of chlorofluorocarbons (CFCs) to allow for the eventual recovery of the ozone layer (Montreal Protocol, 1987; BAS, 2005).

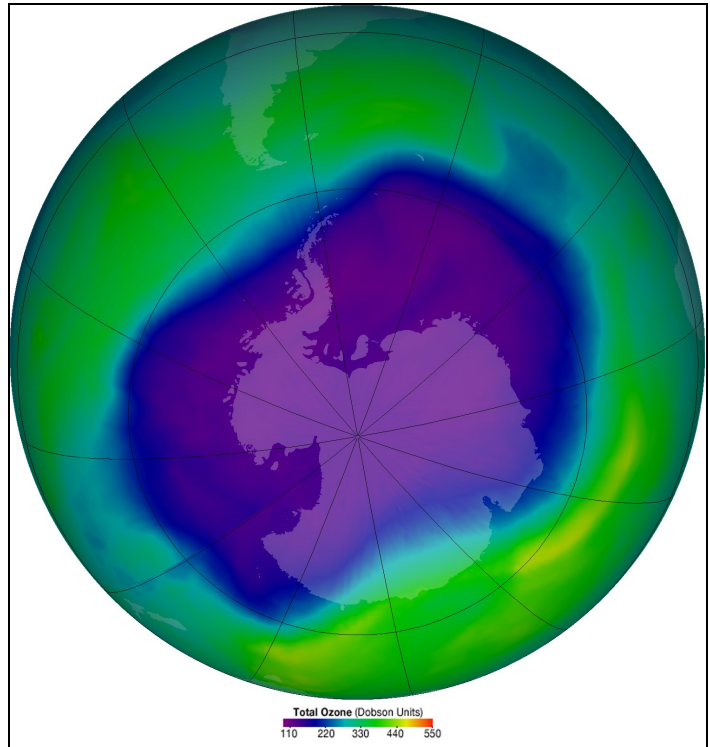


Fig. 2. The largest ozone hole. Image: NASA.

The new issue is global climate change. One of the original scientists who discovered the ozone hole, Jonathan Shanklin, said “we now need to take similar actions to control greenhouse gases, otherwise we will bequeath future generations a significantly different climate from that of today” (BAS, 2005).

Climate change has already caused warming in the polar regions, melting ice and causing sea-level rise and changes in ocean temperature, with implications for ocean circulation, ecosystems and the frequency of extreme-weather events (IPCC, 2007). The potential exists for the marine ecosystem to change dramatically, for habitats to disappear, beginning with river deltas, and even for low-lying nations such as Monaco to disappear underwater. In the Arctic, melting permafrost is releasing a huge, previously ‘locked up’ carbon catchment, which is an accelerant to climate change (IPCC, 2007; Haase, Pers. Comm). To enable policy-makers to comprehend possible futures, far-reaching implications are being assessed for the damage they will cause depending on the amount to which the climate changes in the near future (Fig. 3, from IPCC, 2007).

The fourth International Polar Year (IPY) during 2007/08 brought a 'new wave' of international scientific cooperation (ATS, 2009), allowing polar science to respond to climate change by focussing much of its research activity on 'assembling all the pieces of the climate change jigsaw' (BAS, 2009; IPCC, 2009). The goal is to be able to model future scenarios of global warming as accurately as possible. An example of this research is the ANtarctic geological DRILLing project (ANDRILL), a collaborative project involving more than 200 scientists, students and educators from five nations. ANDRILL's focus is to drill back through time into Antarctic sediments and rocks, to ascertain clues about the future climate from past climate history (ANDRILL, 2009). Fossil studies also give insight into past climate, and have highlighted the 'potentially complex and non-uniform response of Antarctic ice sheets to future global change' (Rosenberg, 2008). It is important to understand how the current phenomenon fits in with past cycles in order to constrain the climate change model.

Antarctica will also play a very important role in several other issues looming large on the horizon. The Antarctic Treaty states that Antarctica is 'for the benefit of all mankind'. Because of its unique isolation and extreme environmental conditions, Antarctica's biodiversity possess a unique genetic complement, from which biotechnology may find useful applications for human life, such as medicines. The Southern Ocean's marine living resources represent a potential sustainably-managed food source. The icy continent also contains 70% of the world's fresh water resources, and water is potentially the most valuable commodity in a global-warming future.

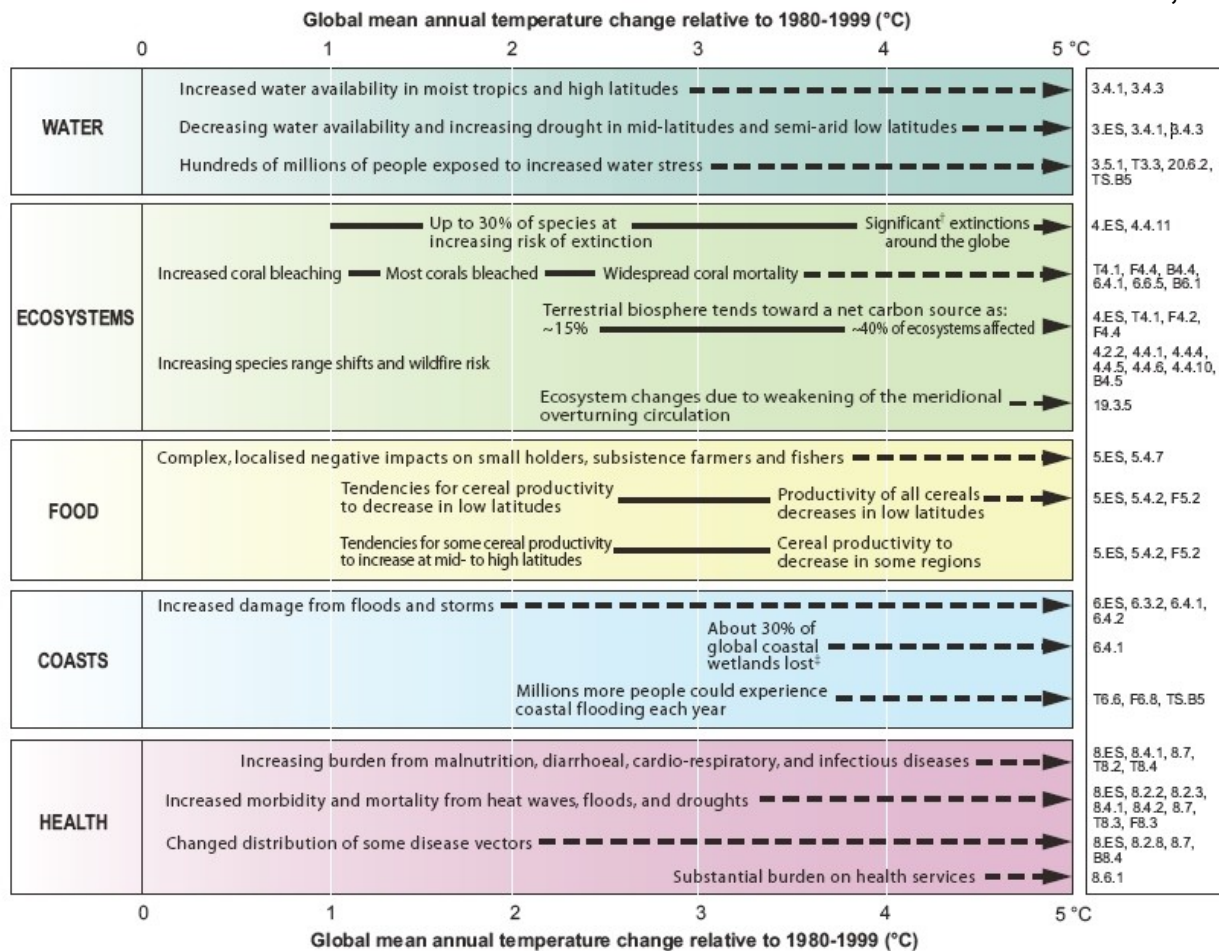
In their most recent report, the Intergovernmental Panel on Climate Change published their projection for a 5°C global mean annual temperature increase scenario in which droughts would increase and hundreds of millions of people would be exposed to more water stress (Fig. 3.) (IPCC, 2007).

In a world of observed, and anticipated, climate change, some impacts cannot be avoided, especially over the long term since most impacts increase in magnitude, but other impacts can be avoided, reduced or delayed if they are addressed through adaptation of human activity (IPCC, 2007) – this means changing habits is needed to reduce vulnerability to climate change. A communal sense of environmental stewardship is needed to galvanise people into action.

Fig. 3. Key impacts as a function of increasing global average temperature change

(Impacts will vary by extent of adaptation, rate of temperature change, and socio-economic pathway)

Source: IPCC, 2007



[†] Significant is defined here as more than 40%.

[‡] Based on average rate of sea level rise of 4.2 mm/year from 2000 to 2080.

Figure SPM.2. Illustrative examples of global impacts projected for climate changes (and sea level and atmospheric carbon dioxide where relevant) associated with different amounts of increase in global average surface temperature in the 21st century [T20.8]. The black lines link impacts, dotted arrows indicate impacts continuing with increasing temperature. Entries are placed so that the left-hand side of the text indicates the approximate onset of a given impact. Quantitative entries for water stress and flooding represent the additional impacts of climate change relative to the conditions projected across the range of Special Report on Emissions Scenarios (SRES) scenarios A1FI, A2, B1 and B2 (see Endbox 3). Adaptation to climate change is not included in these estimations. All entries are from published studies recorded in the chapters of the Assessment. Sources are given in the right-hand column of the Table. Confidence levels for all statements are high.

The IPCC's 2007 Report for Policymakers states there is a very wide range of potential adaptive responses by human societies through new technology (such as sea defences and alternative energy sources), changed behaviour (e.g. through altered food and recreation choices), and changed managerial practices (e.g. altered land use and handling of water resources), and policy manifestations such as planning regulations and sustainable development pathways.

Unfortunately, the report notes there are formidable barriers to human adaptation, which doesn't bode well for our future. These barriers can be environmental, economic, informational, social, attitudinal and behavioural, and are exacerbated in areas where there are already climate hazards, poverty and unequal access to resources, food and water insecurity, conflict and disease (IPCC, 2007)

National and local governments, as well as non-governmental organisations, have a role to play in lowering the barriers to information; because climate change is a legacy of human activity, access to information on the need for people to adapt should be part of the mandate of national and local governments. The more who are aware and instigating early change, the better for us all.

Those with a strong sense of stewardship are in a unique position to lower many of these barriers to human adaptation to anticipated climate change, specifically: informational, social, attitudinal and behavioural barriers.

Because of the role Antarctica plays in our present world climate, and will most probably play in our future, Antarctica is becoming an increasingly important frame of reference in contemporary environmental awareness.

Barriers to Developing Antarctic Awareness

Antarctica can be difficult for people to relate to, as its human touch is so light and so recent. A place no country owns, where no-one lives permanently, where women were allowed only relatively recently, and where no child has grown up. Today many people understand that many scientists are 'down there', but people find the technical language of science difficult. As the singer Elaine Delmar said, "The more you sing, the more you *can* sing" (Pers. Comm.), and so it is with science. As a society, we can't talk about science, because *we don't* talk about science; it is not part of our habits. "The outside world doesn't read science journals – they are too hard" says composer Patrick Shepherd, since "in modern society there's a lack of science culture and a lack of time to gain the expertise" (Shepherd, Pers. Comm.).

There can exist a perception that Antarctica is 'not for' most people. In a short introductory film on Antarctica², New Zealand's most famous Antarctic explorer, the late Sir Edmund Hillary, tried to dispel the notion by ending his narrative with the words "It belongs to you" (Wheeler, 1996).

In the documentary *Artists in Antarctica* (1999), the narrator describes Antarctica as "...a psychic territory for thousands of years...". It remains true that no matter how much people may wish to visit Antarctica and experience 'the great white continent' for themselves, most will never have the opportunity to go, owing to its remoteness and the expense of getting there. For the vast majority of earth's population, in spite of how 'thoroughly mapped and measured' Antarctica becomes, it must remain a psychic territory, to be explored through whatever gateway people are able to access.

Without either direct personal experience or access to any 'gateways', how can people be expected to show an interest in, or try to understand, aspects of Antarctica? Their Personal Identity will not include any elements of Antarctic Identity, and they cannot be expected to feel a sense of stewardship towards the continent.

If Antarctic awareness and a sense of stewardship are to be achieved, psychic 'gateways' to Antarctica must be considered as the substitute for direct personal experience.

²The late Sir Edmund Hillary made a short introductory film on Antarctica, which played on a loop at Kelly Tarlton's Antarctic Encounter and Underwater World in Auckland.

Bringing Antarctica into Popular Consciousness: Gateways to Antarctica

Gateways and Psychic Places

A 'gateway' may be most broadly defined as a portal through which one passes (Fig. 4.); the destination is different to the place of origin. This has geographical as well as psychic connotations. One's psychic space has also changed from where it was before, to where it was after passage.

While movement through a geographic gateway is reversible, movement through a psychic gateway can mean a permanent change; sometimes for the worse, sometimes for the better. Events commonly referred to as a 'life changing experience' are simply a transferral from one psychic space to another



Fig. 4. Gateways to new psychic spaces.

Gateways for Cultivating Antarctic Awareness

The Antarctic Treaty established that the continent would forever be used in peace, for the benefit of all mankind, and the Madrid Protocol established that the continent had intrinsic wilderness and aesthetic values. In this light, Antarctica New Zealand's vision is the same as that of the Australian Antarctic Division: for Antarctica to be "valued, protected and understood". Building support for this vision, which Antarctica New Zealand would like to see all Consultative Parties share (Vance, Pers. Comm.), is then vital for the vision to be realised.

However, in establishing Antarctica as "a natural reserve, dedicated to peace and science", the Antarctic Treaty and Madrid Protocol clearly established that the scientific community would be the main stakeholder benefitting from direct experience in Antarctica. The challenge therefore exists for understanding to extend beyond the scientific community, and in the modern world there are perhaps three main portals, or gateways, through which Antarctic awareness may be extended beyond the scientific community: people, place, and technology.

...Through People

In an increasingly techno-centric society, human contact becomes ever more precious. Person-to-person engagement is a critical way to break down barriers and communicate what can not be communicated in the linear fashion of the written or recorded word, and in much greater resolution than possible through video capture. Media releases require an impersonal concision, yet may still be framed by the media presenter, missing out key pieces of information. On the television, it has become common practice to 'dumb down' issues to 11-second speeches which lack substance and fail to treat the audience as smart or possessing a longer attention span (such as illustrated in *Hollow Men*, 2008). Through personal engagement it is possible to break away from traditional media presentations and flesh out a message.

The most powerful communicators on Antarctic issues are often those who have had the opportunity of living and working in Antarctica – the Antarciticans. For many, the experience proves to have a profound impact on their lives for the better, and many have tried to describe it, though it can prove elusive. The uniqueness of the environment seems to offer a new perspective on their lives.

Some attribute their experience to a power in Antarctica's beauty; others find a spiritual connection there they do not feel elsewhere. Shackleton said "Antarctic exploration is about a journey within oneself"; likewise, Joseph Conrad's novel "Heart of Darkness", the parallel earning it consideration by many as a quintessentially Antarctic novel, even though there is nothing in the narrative which explicitly links the story or even the writer's intention, with the continent (Shepherd, Pers. Comm.).

Antarciticans also often find the experience results in enduring interest: "Antarctica breeds obsession like nothing else" (Shepherd, Pers. Comm.). Those who feel a drive to communicate on Antarctic issues have, in a way, themselves become a gateway through which other people have the opportunity to come to a new understanding or insight. They may be said to have taken on an *Antarctic Gateway Identity*. Such people do not simply engage with the Antarctic themselves; they engage others. Through their personal experience and enthusiasm, they can increase others' awareness and stimulate further interest and a sense of stewardship for the Antarctic. Whether intending to or not, they serve as a portal through which the psyche of others may grow into one of greater Antarctic identity, and thus play a very worthy role as Antarctic ambassadors. They are very likely to share the vision of the New Zealand and Australian national Antarctic

programmes' vision for the continent to be 'valued, protected, understood', and are thus of great value.

Antarcticans have settled everywhere and are often active in their local communities, engaging people of all ages in aspects of Antarctica. However, there is no database of Kiwi Antarcticans which might be tapped into in order for outreach to be coordinated should they be agreeable. This is a significant opportunity to engage non-Antarcticans.

Other social opportunities could exist for returning scientists and support staff to engage with the community directly upon their return. For example, in the past, the Canterbury Club had the unique chance to hear the latest stories and adventures of Captain Scott and his fellow expedition members on 1 April 1904, when they hosted them for a dinner on their return from the National Antarctic (Discovery) Expedition. In April 2006, a commemorative dinner was held at the Canterbury Club to recognise that history (Head, 2006), but the event was not at the grassroots level of scientists and support crew returning from a season of work. Perhaps rekindling such dinners in today's context would present a unique opportunity to both acknowledge the past and to engage new audiences in the unique thrills and challenges posed by living and working in an extreme environment in contemporary times, as well as current Antarctic issues of global importance.

The Artist³ as Gateway is a concept which attributes to the artist a communication role – through exposure of their creative works to a public experience, they create a vicarious means of passage to Antarctica, an opportunity for the audience to be transported to a different psychic place. There is a unique perspective, utilising a language entirely unlike that of the scientist, whose fact-based work is published for a scientific audience but requires re-framing by media for public consumption. Artists and Antarcticans from all walks of life are an invaluable asset in terms of their ability to communicate beyond the world of science, for the benefit of increased awareness of the need to protect the icy continent from anthropogenic harm.

³ In this report, the Artist is referred to as a practitioner of any of the arts, including visual arts, performance arts, writers, poets, composers, filmmakers and so on.

...Through Place

With respect to Antarctica, the term 'Gateway' is most commonly used to symbolise a geographic location on the Antarctic Rim, with a maritime port or airport through which Antarctic personnel (and in some cases, tourists) typically pass en route to the southern continent. Currently there are six recognised Antarctic Gateway cities: Capetown (South Africa), Christchurch (New Zealand), Hobart (Australia), Punta Arenas (Chile), Stanley (Falkland Islands), and Ushuaia (Argentina).

These cities have become intrinsically linked with Antarctica owing to their geographic proximity, historical connections as a 'jumping off point' for expeditions, and in modern times, through the infrastructural support they are able to offer national Antarctic programmes. Stanley, for example, hosts the British Antarctic Survey, Hobart hosts the French as well as the Australian Antarctic programmes, Capetown is utilised by the Russian and German Antarctic programmes, and Christchurch hosts the United States Antarctic Program as well as the Italian programme (PNRA). Owing to their geographic proximity, Ushuaia and Punta Arenas are popular ports of departure for tourist ventures heading for the Antarctic Peninsula.

As a Gateway city to the Ross Sea Region, Christchurch's infrastructure features an international airport and a historic sea port (Lyttelton). Both are used by the resident national Antarctic programmes, as well as a number of eco-tourism operators. Of these physical gateways, only Hobart and Christchurch, and to a lesser extent, South Africa, actively promote their gateway status and seek to bring further national Antarctic programs to utilise their infrastructure.

The infrastructure which grows to support the presence of other national Antarctic programmes means a great deal to these cities and their countries, in terms of economic benefits and international relations opportunities, though the level of impact such as these may change quickly with shifting world politics⁴ and economy⁵.

⁴ As recently as 2002, Malaysia looked set to develop a comprehensive Antarctic programme as an expression of its belief in environmental values, and as a platform on which it could develop its capacity for top-flight science and technology. Malaysia's impending involvement in the ATS seems to have stalled though; possibly reflecting a loss of elite political support with the resignation of then-Prime Minister Mahathir Mohamad, and no elite replacement to sustain the momentum (Brady *et al.*, 2009). With changing political leadership, the new leader's protectionist focus is unknown (Johnson, Pers. Comm.).

The United States Antarctic Program (USAP) has traditionally been the largest presence in Antarctica, however domestic funding for their activities faces uncertainty with the change of president to Barack Obama. While Obama has stated a commitment to environmental protection, it is unclear whether this extends to a maintained, increased, or decreased Antarctic programme. The network currently contracted by the USAP to provide logistics is currently under review, adding uncertainty.

These cities, and by extension, their countries, would seem an obvious place to focus efforts on developing Antarctic awareness, as many people already know or have met someone who has been down to the ice, and often incorporated this into their personal storytelling archive. Moreover, in these cities many people work directly in, or on the periphery of, the fabric of the Antarctic support industry.

Other geographic locations with significant involvement in Antarctic affairs may also possess an Antarctic Gateway status, such as Cambridge in the United Kingdom, where the Scott Polar Research Institute (SPRI) is based – it is also a significant repository for Antarctic memorabilia.

These residents could be said to have an Antarctic Gateway Identity if they were to develop a strong sense of Antarctic awareness intrinsically linked with a sense of place, and a sense of pride in that relationship. They would be likely to feel like an ambassador for the protection of Antarctica from anthropogenic harm.

⁵ Antarctic science is expensive science, and not all nations can afford to carry it out. As a member of the Antarctic Treaty System, the legal burden of ratifying the principles in domestic legislation is taken on, along with the financial burden of doing all their Antarctic activities 'by the book', to a strict environmental protocol, rather than 'free-styling' it as cheaply as possible, as in the past - with consequent environmental harm. State motivations for engagement in Antarctica therefore vary; some nations see having an independent national Antarctic programme as symbolic of their wealth and are determined to 'go it alone'; others place more focus on the scientific benefits and focus on sharing transport, energy or base resources to lower the costs. Developing nations in particular seem to value the ATS as an alternative platform to the UN in which to develop their international relations and participate in international decision making. Other nations seem to take the holding-pattern approach of a conservative investor; fulfilling only the minimum requirements to join the Antarctic Treaty, but hold off on serious science while resource access issues are debated (Brady *et al.*, 2009).

...Through Technology

In technology, the term 'gateway' is used to describe an interface between networks; thus a gateway is where two networks meet. Through the technology gateway, networks of society may interface with networks of information on Antarctica.

This is a critical means of reaching the youngest generations, whose world view is shaped by interaction with technology on a previously unprecedented scale. These are young people for whom texting, Google, and applications such as Skype, Bebo, Facebook and Myspace are essential lifestyle frames of reference. From them, the next generation of Antarctic scientists is to be found, so engagement on their terms is essential if the opportunity to develop an interest is to be made accessible.

Risks Associated with Increasing Antarctic Awareness

There is perhaps an undesirable side to promoting awareness of Antarctica. In the documentary about artists going down to the ice, New Zealand artist Nigel Brown questioned the presence of people in Antarctica (Unframed, 1999). At the conclusion of his five-part television documentary series on Antarctica, presenter Marcus Lush wondered – guiltily, he admitted, having had the opportunity to visit himself – if perhaps humans should not be in Antarctica at all (Ice, 2007).

New Zealand's poet laureate, Bill Manhire, notes that "questions surrounding artist visits to Antarctica replicate those around tourism... Are these activities giving useful and stimulating access to those who can't go there? Do they build a lobby which might protect Antarctica from damaging developments? Or are they creating a demand that will lead to more and more private visits?" (Manhire, Pers. Comm.).

It is therefore critical that overall, responsibility is taken to ensure that growing Antarctic awareness is linked with a growing awareness of Antarctica's role in the earth's changing climate, and therefore the legacy we leave future generations. As an Antarctic Gateway nation with historic and contemporary connections to Antarctica, the New Zealand people are well-positioned to take a leadership role in the stewardship of Antarctica. This would flow naturally if Antarctica was part of the national psyche, but is this the case? What is the current situation? In order to understand, the following section examines New Zealand's current Gateway Identity, assessing possible rationale for Antarctica to take a place in the national psyche, and considering the various ways in which this is currently manifested.

Rationale for Antarctica's Place in the National Psyche

New Zealand has significant links with Antarctica; the roots connecting the two lands extend from deep time right through to the present, where aspects of Antarctica are beginning to emerge as part of the contemporary culture. Not all New Zealanders may be aware of this, or particularly care, but the connections exist in myriad forms, some tangible, some intangible.

Historic Connections

New Zealand was once attached⁶ to Antarctica, as part of the ancient supercontinent Gondwanaland. In the Trans-Antarctic Mountains there have been found fossils of *Nothofagus spp.*, relatives of the Beech trees which so characterise much of New Zealand's present-day native forest (BAS, 2009).

In the 18th century, Captain Cook, who was responsible for claiming New Zealand as part of Britain's empire, completed the first circumnavigation of Antarctica in 1773, establishing that it did not connect to landmasses already known.

The majority of New Zealand's historical connections however, stem from the 19th century, as Antarctica was only sighted in 1820. Key events in Antarctic exploration involved New Zealanders in their crew. Kiwis ventured south as early as 1839⁷, and the heritage stories since then are "incredible" (Johnson, Pers. Comm.).

Many of the early expeditions passed through New Zealand ports in the 'Heroic Era' of exploration (1895-1917) (Fig. 5). These visits placed New Zealand on the world stage, and people actively became involved through fundraising, hosting and provision of supplies such as beef, mutton, sheep, cheese, butter and coal. New Zealanders turned out in their thousands to farewell the famous expeditions as they set off to make new records for furthest south, first overwintering, the discovery of new lands, and reaching the legendary magnetic and geographic South Poles.

⁶New Zealand probably separated from Antarctica in the Mesozoic, between 110 Ma (Davy, 2006). Australia began to separate from Antarctica perhaps 80 Ma, but sea-floor spreading between them really got underway about 40 MYA.

⁷ A Maori, John Sac, was a member of the Wilkes Expedition when it crossed the Antarctic Circle in 1839.

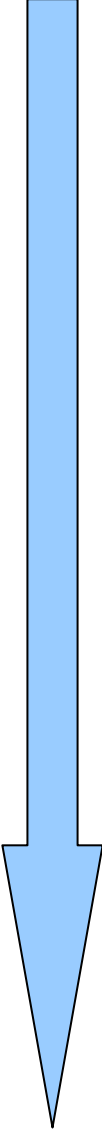
Tens of thousands of New Zealanders saw off Scott in the *Discovery* as she left Lyttelton on 21 December 1901. Scott wrote: “It is most difficult to speak in fitting terms of the kindness shown to us in New Zealand... On every side we were accorded the most generous terms by the firms or individuals with whom we had to deal in business matters” (Scott, 1905). Likewise, when Shackleton’s *Nimrod* expedition left Lyttelton on New Years’ Day 1908, they were “cheered on by a huge crowd, the shriek of steam whistles and the crash of guns” (AHT, 2009). This was particularly legendary for Shackleton’s decision to turn back from the pole - he famously wrote his wife that he was sure she’d “rather have a live donkey than a dead lion”. It is still considered the finest decision in Antarctic exploration (AHT, 2009). The leaders of the expeditions came to be associated with Edwardian ideals, and were later role models for soldiers fighting in World War II.

Sometimes the New Zealand government part-funded the expeditions, such as with Scott’s ‘British Antarctic (Terra Nova) Expedition’ (1910-13), the relief expedition in 1917 to rescue Shackleton’s men, and the British-Australia-New Zealand (BANZARE) expedition (1929). Occasionally crew members of these expeditions returned to New Zealand after WWI, such as Scott’s Dog Driver, Demetri Gerof (revisited), and his Cook, Thomas C. Clissold (settled in Napier). Shackleton’s carpenter, Harry McNeish, settled in Wellington.

New Zealanders were also sometimes involved as crew members. Four were part of Mawson’s Australian Antarctic (Aurora) Expedition (1911-13). The most famous early Kiwi Antarctic was Frank Worsley, however, who was Shackleton’s captain and navigator for the Imperial Trans-Antarctic Expedition (1914-17). Worsley was from Akaroa and had spent part of his childhood in Christchurch. When the *Endurance* was crushed by ice and sank, leaving the expedition stranded on the ice floes, it was Worsley’s navigation on dead reckoning, which he called “a merry jest of guesswork” that got the entire crew safely to Elephant Island six days away, and with Shackleton in the *James Caird* lifeboat, another 800 miles to South Georgia⁸. The feat is almost unrivalled in the history of seamanship, and a critical part of “the greatest epic in the history of Antarctica” (Wheeler, 1996).

⁸ Worsley also accompanied Shackleton and Crean in the first overland crossing of South Georgia’s mountains and glaciers to Stromness whaling station on the other side, from where the mission to rescue the remaining men was mounted.

Fig. 5. Residents and visitors of New Zealand ports were witness to the comings and goings of some of the greatest expeditions in Antarctic history.

- 
- 30 Nov 1894: **Port Chalmers**: departure of Kristensen's Norwegian whaling ship *The Antarctic*. Claim to fame: First to set foot on the Antarctic continent (24 Jan 1895), possibly by a Kiwi, 17 year old Nelsonian Alexander von Tunzelmann (also claimed by Kristensen and Borchgrevink)
- 31 Mar 1900: **Stewart Island**: Arrival of Borchgrevink's 'British Southern Cross Expedition' (1898-1900). Claim to fame: First Antarctic dwelling, first winter-over, first sledging on the Ross Ice Shelf.
- 1 Apr 1900: **Bluff**: Borchgrevink sent news of their safe return home.
- 1901: **Lyttelton and Port Chalmers**: departure of Scott's 'National Antarctic (*Discovery*) Expedition' (1901-04). Claim to fame: First aerial photographs of Antarctica, plenty of science, new furthest south record (AHT, 2009).
- 6 Dec 1902: **Lyttelton**: departure of the *Morning*, relief ship for the ice-bound *Discovery*.
- 1 Apr 1904: **Lyttelton**: safe return of the *Discovery*.
- 1 Jan 1908: **Lyttelton**: departure of Shackleton's 'British Antarctic (*Nimrod*) Expedition' (1907-09). Claim to fame: first ascent of Mount Erebus, first to make the South Magnetic Pole, first to test a motor car in Antarctica, produced and published the first book in Antarctica (the *Aurora Australis*), new furthest south.
- 25 Mar 1909: **Lyttelton**: *Nimrod* returns.
- 29 Nov 1910: **Lyttelton**: departure of Scott's 'British Antarctic (*Terra Nova*) Expedition' (1910-13). Also called in at **Port Chalmers**. Claim to fame: "Worst Journey in the World" (Apsley Cherry-Garrard's book), loss of Scott's Polar Party on their return from the South Pole. *Terra Nova* waited out the winter in Lyttelton.
- 1917: **Port Chalmers**: repair of the *Aurora*, Shackleton's ship blown out to sea during the 'Trans-Antarctic Expedition' (1914-17).

New Zealand became 'officially' involved with Antarctica on 30 July 1923, acquiring administrative care for the Ross Dependency⁹ via Britain, issuing whaling licences, joining the International Whaling Commission in 1946, and in 1957 joining IGY and establishing Scott Base (under Sir Edmund Hillary's command) and Cape Hallett Station (jointly with the US). The nation's first Antarctic Division (in the Department of Scientific and Industrial Research) was established when New Zealand signed the Antarctic Treaty in 1959. This was also when Kiwis started to notice American sailors everywhere, since Operation Deep Freeze had begun to operate from Christchurch.

The public's interest in Antarctica remained strong, maintained by the New Zealand Antarctic Society¹⁰ and in Hillary the public gained another Antarctic icon when he cunningly beat Sir Vivian Fuchs to the South Pole on a modified tractor¹¹. This made a permanent mark on the Kiwi Antarctic psyche. Not long after, the Royal New Zealand Air Force were flying C130 Hercules to Antarctica and landing on the ice (1965). New Zealanders then began their own spirit of Antarctic adventure, voyaging there solo by yacht (David Lewis, 1972-74) and descending into the active volcano of Mount Erebus (1974).

An indelibly tragic mark was made by the crash of Air New Zealand flight TE901 into Mount Erebus on 28 November 1979, when all 257 passengers and crew on board were killed (Binning, 2008). The report into the crash and subsequent independent inquiry¹² by

⁹ The Ross Dependency was named after Sir James Clark Ross, who had led the first forays into the Ross Sea. The area is now beginning to be referred to as the more politically neutral 'Ross Sea Region'.

¹⁰ The New Zealand Antarctic Society was founded during the Depression in 1933 and has a dedicated membership, running continuously since 1933 with the exception of a small recess during World War II. The first journal was published in 1949. It is the world's longest-running Antarctic Society.

¹¹ British Commonwealth Trans-Antarctic Expedition which stamped Antarctica into the national psyche. British Sir Vivian Fuchs set out from the Weddell Sea side, intending to make the first overland crossing since Scott. On the Ross Sea side, Hillary was supposed to only lay depots for Fuchs, but instead beat him to the South Pole on 4 January 1958, and certainly the first to do so using a tractor.

¹² Mahon asserted that Air New Zealand fatally altered the flightpath without informing the pilots, who had also received authorisation to descend to inappropriate altitude, and found themselves in whiteout conditions without prior experience of Antarctic conditions, so the pilots were at no fault. Justice Mahon resigned and died five years later, and was recently honoured by the New Zealand Airline Pilots Association (ALPA) posthumously presented Justice Mahon with the Jim Collins Memorial Award for exceptional contributions to air safety, "forever changing the general approach used in transport accidents investigations worldwide" (NZPA, 2008).

Justice Peter Mahon, released in 1981 caused a public furore, when Mahon accused Air New Zealand of an 'orchestrated litany of lies', one of the most famous phrases in aviation legal history (NZPA, 2008) and Robert Muldoon's government slammed the report, blaming the accident on the pilots, and their handling of the situation still causes outrage (Haines, 2008).

The Erebus disaster was New Zealand's biggest single tragedy, with one more death than the Napier earthquake of 1931. As few New Zealanders were untouched by the event, it constitutes a major event in the nation's history (Abbiss, 2003). Sadly, the recent Air New Zealand A320 crash off the coast of Perpignan in 2008 occurred on the 29th anniversary of the Erebus disaster, with the loss of five New Zealanders and two Germans; it is seen as a "tragic coincidence" (Binning, 2008; Freer, 2008).

Contemporary Connections

International Activity

Since signing the Antarctic Treaty in 1959, New Zealand has consistently been politically active within the treaty system, maintaining "a position at the forefront of treaty initiatives" (Antarctica New Zealand, 2008). Rights to administer a national Antarctic programme are exercised, and the associated responsibilities are taken on and fulfilled; such as to cooperate, monitor and control activities as per the Antarctic Treaty, and to monitor environmental impact as per and the 1991 Madrid Protocol, given force by the Antarctica (Environmental Protection) Act of 1991.

New Zealand's current operations on the continent are coordinated by Antarctica New Zealand, established in 1996. Its offices are at the International Antarctic Centre in Christchurch, along with the United States Antarctic Program's New Zealand base of operations, an office of the Italian Antarctic Programme (PNRA), and the Antarctic Heritage Trust. The trust is charged with taking care of four historic huts on the Antarctic continent, including the only building in the world known to be the first constructed on a continent. All four huts were named on the World Monuments Fund 100 Most Endangered Sites in the World, confirming their status amongst the world's greatest heritage sites (AHT, 2009). New Zealand scientists are involved in many Antarctic research projects with international collaboration as a hallmark.

Domestic Focal Points

Several Antarctic-related tourist attractions and museums housing displays of Antarctic artefacts, photographic records and recounted memories exist in Canterbury, including the Antarctic Attraction, Canterbury Museum's Antarctic Museum Centre (estab. 1974), Lyttelton Museum, Ferrymead Historic Park, the Airforce Museum and the Akaroa Musuem. Christchurch also has the International Antarctic Centre (marketed as "the World's Best Antarctic Attraction") and Auckland has Kelly Tarlton's Antarctic Encounter and Underwater World.

The main centres all now offer Antarctic studies at tertiary level, such as Gateway Antarctica at the University of Canterbury, the Antarctic research centres at Victoria University of Wellington and Waikato University, and courses at Auckland University.

Antarctic Link Canterbury is a strong group which involves all the key stakeholders in the regional Antarctic industry.

Public Monuments and Memorials

There exist several public monuments attesting to New Zealand's Antarctic connections. In Christchurch, a statue of Scott, made by his widow Kathleen, stands by the Avon River. The statue is the site for Christchurch's annual wreath-laying ceremony to remember those who have lost their lives in the Antarctic. Wellington's Karori Cemetery is the resting place and memorial of Harry McNeish, the carpenter on Shackleton's Imperial Trans-Antarctic Expedition (1914-17), who made seaworthy the *Endurance's* humble lifeboat, the *James Caird*, for its epic journey to Elephant Island and on to South Georgia, with McNeish a part of the entire journey by sea. His memorial, and the bronze statue of his cat, Mrs Chippy, were erected by the New Zealand Antarctic Society in 1959 and 2004, respectively.

There are also memorials to those who died in the Erebus disaster: in 2004, wreaths were laid at a memorial cross on the lower slopes of Mount Erebus to commemorate the 25th anniversary of the tragedy; services are held at Scott Base and in New Zealand, where Erebus water is held in six churches across the country, and a memorial garden is being planned. The Erebus Chalice travels to McMurdo Station's Chapel of the Snows for every austral summer, returning for the winter to Christ Church Cathedral in Canterbury. Its journeys are marked by services of remembrance.

'Erebus Voices' was written by New Zealand poet laureate Bill Manhire for Sir Edmund Hillary to read at the 25th Commemorative Service, Scott Base, 28 November 2004.

EREBUS VOICES

Bill Manhire, November 2004

The Mountain

I am here beside my brother, Terror.

I am the place of human error.

I am beauty and cloud, and I am sorrow;

I am tears which you will weep tomorrow.

I am the sky and the exhausting gale.

I am the place of ice. I am the debris trail.

I am as far as you can see.

I am the place of memory.

And I am still a hand, a fingertip, a ring.

I am what there is no forgetting.

I am the one with truly broken heart.

I watched them fall, and freeze, and break apart.

The Dead

We fell.

Yet we were loved and we are lifted.

We froze.

Yet we were loved and we are warm.

We broke apart.

Yet we are here and we are whole.

Personal Connections

Over the years since Scott Base was established, many New Zealanders have worked in Antarctica in scientific research programmes or in a support capacity; to this list of 'Antarcticans' may be added the names of those travelling as part of artist, media and teacher programmes. There is now a growing body of New Zealand Antarctic art. Adventurers and eco-tourists have also travelled there, some from a South American point of departure. Many more New Zealanders know someone who has been there.

Phrases from the pages of Antarctic history, such as Captain Titus Oates' selfless "I am just going outside and may be some time", have entered popular culture and in New Zealand been subverted into an irreverent expression for needing relief. Cold weather is popularly associated with Antarctica. Some of these manifestations in popular culture are represented opposite.

Films such as 'March of the Penguins' (2005) and 'Happy Feet' (2006), brought the Antarctic wilderness into the consciousness of a new generation, while TVNZ's documentary on Antarctica, hosted by Marcus Lush, which rated higher than Coronation Street when broadcast (Vance, Pers. Comm.).

In 2006, 2007 and 2008, Christchurch has held an Antarctic Festival to celebrate these connections, and has achieved success on many levels. The festival is currently in hiatus to assess its future growth and prepare for the first of biennial festivals, beginning in 2010.

"...in Invercargill...I grew up knowing that if I got in a small boat and rowed south for a very long time, I would eventually bump into an iceberg...I saw...`Scott of the Antarctic' when I was about ten....Scott and Shackleton both passed through New Zealand; Port Chalmers was Scott's final landfall before he headed down towards the pole...the explorers were part of the local mythology. I also remember when I was at high school in Dunedin...the streets were full of American sailors who were all part of Operation Deep Freeze...coming and going from the ice. If you're from the south of New Zealand, you probably have the same relationship to Antarctica as many Australians have to the desert interior: you may never go there, but it's part of your psychic geography. ...in the 1950s...in pubs at the bottom of New Zealand's South Island, the drinkers in the bar would complain about the weather coming up from the ice: 'It's what those Russians and Americans are doing down at the pole.'" BILL MANHIRE (Hill, 2007)

"[growing up in Lyttelton] Antarctica was always part of my life. My next-door neighbours were children of people who'd been on the early expeditions." BADEN NORRIS (Wheeler, 1996)

"Antarctica is like our fourth island" PATRICK SHEPHERD (Pers. Comm.)

"`Oh, my cousin went there.' Everybody in New Zealand knew someone who had been south, even if it was the milkman's brother. It brought the continent into their sphere of consciousness...`Antarctica does sit in your imagination more if you live in the south of New Zealand,' someone said. `Also, on a global scale, New Zealand is involved, for once.' ...he needed to `go for an Oatie', meaning to visit the lavatory...[it] evolved from Oates' famous departure, with which everyone in New Zealand was familiar...A Maori waitress...said 'You know, when we feel a cold wind on our faces, we know where it's coming from'" SARA WHEELER (Wheeler, 1996)

Assessing New Zealand's Antarctic Identity

The previous section has shown that New Zealand is littered with a myriad of tangible and intangible Antarctic connections through both people and place, which would seem to substantiate Antarctica being part of the national identity. But is it?

Individual and National Identity

In Vygotskian theory, people are shaped by their sociocultural context, which includes their physical, technological, socioeconomic, and intellectual environments (Daniels, 1996). People's attitudes, habits, beliefs and ideas, along with a sense of continuity, affiliation and uniqueness from others are what shape their *Individual Identity*.

Similarly, Hobsbawm argues that *National Identity* involves a sense of continuity and a point of difference, so that its members feel they are part of an imagined community with a common bond, without having met each other. As an imagined community, it is therefore a popular mythology. He argues that invented traditions including education, public ceremonies and mass production of public monuments help define nations.

Elaborating an Antarctic Identity

By extension of the arguments above, a person may be reasonably expected to feel an Antarctic Identity if aspects of Antarctica are part of their sociocultural context, and if an association provides some sense of continuity, affiliation and a point of difference.

Sociocultural Contexts

An Antarctic Identity can be found at different levels of society (Fig. 6); multiple levels serve to reinforce, and support the continuation of, that identity, complicating it and making it more robust. Thus a person whose primary activity has an Antarctic connection, and/or who maintains an interest in their private life, will have their Antarctic Identity supported and reinforced, should they also live in a place with Antarctic Identity, in a country with Antarctic Identity.

Individuals and Nations with the strongest Antarctic Identity may tend to be more aware of, and to take a position on, facets of Antarctica such as its human history, relative purity, scientific importance, aesthetics, role in tourism, environmental role, and Antarctica's potential future as a sustainable natural resource.

New Zealand's geopolitical positioning is part of the country's gateway identity, being a world leader as one of the original signatories of the Antarctic Treaty (Johnson, Pers. Comm.).

Fig. 6. Sociocultural Contexts of Antarctic Identity

Level	Aspects of Antarctic Identity	Examples
National	Country has an Antarctic base and/or active National Antarctic Programme, country has a geographic, historic, and/or cultural connection to Antarctica	New Zealand, Australia
Civic	Community has an Air/Sea port of departure to Antarctica, used by their own/multiple National Antarctic Programmes, community has an historic or cultural connection	Christchurch, Lyttelton, Oamaru, Invercargill, Hobart
Organisational	Activities of community groups and businesses, branding <i>Note: if an organisation's Antarctic Identity relies on branding alone, it will have little integrity.</i>	New Zealand Antarctic Society (long-term activity), Christchurch International Airport (long-term activity), Air New Zealand (long-term activity), Meridian Energy (developing activity)
Individual	Direct Antarctic experience (Antarcticans), personal interest, employment in an organisation with Antarctic activities, social engagement, cultural engagement (residence in a city, or to a lesser extent, a country, with a strong GI)	Antarcticans, members of the Antarctic Society, Antarctic Studies students, public who engage with Antarctic events.
Product	Identifiable Antarctic connection plus exposure to the public	Bluebird chips, Happy Feet film, Marcus Lush's high-rating Antarctica series

From a negative point of view, some states and cities are gaining a notorious Antarctic Identity through a financial, negligent, supportive, 'flag/port of convenience' connection with illegal, unregulated, and unreported (IUU) fishing. IUU fishing, most notoriously of the toothfish (*Dissostichus* spp.) utilises longline and gillnet fishing; its prevalence is leading toward unsustainable levels of fish stocks in the Southern and Indian oceans, and unsustainable seabird populations (CCAMLR, 2009).

Though Antarctic connections exist at all levels of New Zealand society, the extent to which they exist in individuals' lives may vary. The sense of Antarctic connection is felt much more strongly in the South Island, since the ports of Lyttelton, Port Chalmers, and to a lesser extent, Invercargill and Bluff, have significant historic links as ports-of-call for legendary "heroic era" expeditions, making real connections with both people and place were made in the past. Yet it is perhaps true that Kiwis do not feel Antarctica is intrinsically linked with their sense of place; in the younger generations these historical links are not widely known.

The organisational connections would be very Christchurch-centric, since that is where the majority of New Zealand's Antarctic sector are based, notwithstanding the New Zealand Antarctic Society whose membership is in fact international.

At the level of the individual, many people throughout New Zealand supported the early expeditions through fundraising, but awareness of this has diminished over the years. New Zealand Antarcticans have settled everywhere and are often active in their local communities, giving talks at schools or retirement homes, or participating in Antarctic celebrations. David Harrowfield, a friend of Hillary's since he was 14 years old, and veteran of 40 science expeditions to the Antarctic, is one such person. Describing himself as "totally besotted", Harrowfield has lectured on ecotourism voyages to the Antarctic and at home "barely a day goes by" without some connection to the Antarctic, whether receiving visitors in his "Polar Room" full of memorabilia, or talking to school children (Harrowfield, Pers. Comm.).

Further Identity Shapers

It follows that the stronger the continuity, sense of affiliation and point of difference, the stronger the identity. Perhaps herein lie reasons Antarctica does not seem to have permeated the popular consciousness. Certainly there is *interest*, as the ratings success of Marcus Lush's television documentary series on Antarctica (Ice, 2007) showed, but *Antarctic awareness* in the general public does not seem to be high, and it follows that without awareness it is not possible for something to become part of the national identity. Antarctica New Zealand has long taken an active role in running a media programme which maintains regular output to the New Zealand and International media networks in order to raise the profile of its activities on the ice, but taken alone, is this enough?

Continuity

Antarctica's presence in the news and national consciousness seems to be sporadic. It has been a prevalent association at three key points in New Zealand history: firstly during the 'Heroic' era, secondly, when Hillary beat Fuchs to the pole and Scott Base began, and thirdly, as a consequence of the way in which the Erebus crash impacted on the lives of so many New Zealanders. New Zealand author Tessa Duder (b. 1940), who travelled to Antarctica as an Antarctic Arts Fellow in 2007/08, said her generation grew up 'devouring' books and films about the heroic explorers. However, certain in-between generations, in particular those born since the late 1970s, have experienced no major connection with Antarctica during their childhoods. It is possible that the non-continuity of presence in Kiwi lives, and generation-skipping of focus, is proving insufficient to maintained awareness of any issues beyond the transient and topical, or indeed any sense of relevance to Kiwis' everyday lives.

Affiliation: Attitudes

The history of New Zealand's involvement in international research projects shows that New Zealanders can achieve great things through collaboration, and adds to the country's peaceful identity. New Zealanders also value their past, and through the Antarctic Heritage Trust, show they are world leaders in heritage preservation(Johnson, Pers. Comm.).

Apart from the means in which Antarctic references and expressions have infiltrated New Zealand popular culture, New Zealanders have also tended to take their attitudes, customs and beliefs to the ice, such that there is in fact much of Kiwi life on the ice to which New Zealand culture should easily relate, as they reference pre-existing elements of New Zealand identity.

The desire to go to Antarctica itself shows a spirit of adventure, which both men and women can relate to, though it is perhaps easiest for the New Zealand male to relate to figures in the 'Heroic Era' of Antarctica's history, since exploration was historically a 'man's game'. "We are pioneers; go-getters" (Johnson, Pers. Comm.). The deeds of Frank Worsley, not widely promoted, and Sir Edmund Hillary, most well-known for his Himalayan exploits and honouring on the New Zealand five dollar note, could serve as key humanising links to Antarctica.

Ideals of 'practical ability, rugged individualism and gritty self-reliance' were epitomised by Worsley (Abbiss, 2003), Shackleton's navigator on the legendary *Endurance* expedition,

and an opportunistic 'can-do' attitude and the notion of 'heroic achievement' is easily associated with Hillary beating Fuchs to the South Pole by tractor in 1958 (possibly also a case of inappropriate individualism and up-staging) (Abbiss, 2003). Fuchs did in fact shut Hillary in the trailer and refused to speak to him all the way back from the Pole to Scott Base). Kiwi identities of ingenuity, practical capacity and toughness are demonstrated in the deeds of both Hillary and Worsley (Abbiss, 2003). For the New Zealand male, Hillary perhaps also served a key role in 'remasculating' their identity in a time of uncertain economic climate and the shifting of traditional gender balances in the workplace and at home (Idiens, Pers. Comm.).

It is difficult for women to find a unique resonance in New Zealand's historic Antarctic connections – it was not until 1968 that Kiwi women¹³ were able to work in Antarctica, and 1976 that they were able to winter over, an indictment of the attitudes of the time permitting the continent's continued dominance by men. A Kiwi did number among the first women¹⁴ to the South Pole, which may be of interest to some people. Things have since become more inclusive, however; women hold both the current and previous Scott Base Coordinators positions; Yvonne Boesterling (October 2008 – early January 2009) and Cornelia Vervoorn (early January – February 2009) (Antarctica New Zealand, 2008b).

The New Zealanders' sense of 'number 8 wire ingenuity', capacity for lateral thinking and technical ability goes back to Rutherford and echoes through the achievements of New Zealand scientists over the years; "these reinforce who we are...the Rutherfords of the world" (Johnson, Pers. Comm.). On the ice this has been amply epitomised by staff at Scott Base, such as in tales of a mechanic who fixed a tracked vehicle broken down in the field using a piece of hacksaw blade. A scientist was quoted as saying "we like to think that you can be somewhere with no help from anyone and you can still actually work out how to sort things out, how to fix things, how to create things out of nothing (Abbiss, 2003). This is similar to the Australian attitude epitomised by the Frank Hurley, the Australian who joined Mawson's expedition when only 26 years old. One of Hurley's catchphrases was "My Dad said, 'if you want to do something, either find a way, or make one'" (The Man Who Made History, 2004). The scientific and research achievements and ideas of New Zealand innovators need to be more strongly marketed...developments of "Centres of Excellence" [will require] central government support" (Johnson, Pers. Comm.).

¹³ Marie Derby was the first New Zealand woman to work in Antarctica.

¹⁴ In 1969, New Zealander Pamela Young was part of a group of women including Americans and an Australian, who were the first women in the world to set foot at the South Pole.

Affiliation: Customs

The Kiwi love of 'op-shops', weekend garage sales, markets and lucky scores finds an expression in Antarctica, where Scott Base residents have historically shown a knack for finding valuable use in recycled items. They even have a reputation for frequenting 'Skua Central' at McMurdo Station, from which the beloved 'A-frame' was scavenged and towed onto the McMurdo Ice Shelf, where it is now quite possibly the world's southernmost – and Antarctica's only – 'bach' (Abbiss, 2003).

The association of Automobile Association (AA) symbols with New Zealand's wilderness areas find resonance in the Pram Point landscape, where a sign on the route from McMurdo Station to Scott Base features every possible application of the roadside symbols system, along with Keas and a black cat (Fig. 7).



Fig. 7. Pram Point sign alongside route from McMurdo Station to Scott Base featuring icons of New Zealand's wilderness route signage. Image: P.J. Charpenter.

On the ice, the Scott Base culture has perpetuated the Kiwi reputation for friendliness, hospitality, loving a game of rugby and parties, and only tolerating good beer (Mastro, 1999).

Kiwis have even brought to the Antarctic the less widely-embraced, but instantly recognisable, kitsch tradition of garden gnomes. The world's first travelling gnome was Charlie via Kiwi Henry Sunderland (Fig. 8) - another colourful first for New Zealand. Charlie and Henry's 1977 visit even extended to the South Pole, courtesy of the USAF in gratitude for Sunderland's extracurricular services as McMurdo artist on-hand to researchers, during his time there as mess cook. To

Sunderland, profoundly impacted by the environmental damage he was witness to being inflicted on the Ross Sea region, the gnome came to represent a symbol of environmental protection, for which he coined its acronym "Guarding Naturally Over Mother Earth".



Fig. 8. Henry Sunderland and Charlie at the South Pole, 1977. Image: Henry Sunderland.

The present author hosted the most recent gnome excursion to Antarctica (Fig. 7), *Achilles* being quite a character, autographed by Kiwi icons such as Antarcticans Sir Edmund Hillary, Baden Norris, David "the Duke" Harrowfield, the previous Prime Minister Helen Clark, former Christchurch Mayor Garry Moore and current Christchurch Mayor, Bob Parker. The gnome will be used as a mascot in future Antarctic-related events targeted at a primary school-aged audience, for which issues of environmental protection will be the focus.

Affiliation: Beliefs

It has been suggested that a step in the formation and maturity of the national identity was taken in the national furore following the handling of the Erebus air accident investigation (Abbiss, 2003). The event marked a trigger point in history when people were led to question their institutions, inspiring self-criticism and self-awareness, in a similar way which the Springbok tour of 1981 and Gallipoli before that had. People questioned "the integrity of a New Zealand corporate icon and flag carrier and the workings of the New Zealand justice system, ...the verdicts [from] the air accident inquiry...and the later Royal Commission by Justice Mahon" (Abbiss, 2003).

Many New Zealanders see themselves as leaders in the environmental protection area, and wilderness is intrinsic to our national marketing (Johnson, Pers. Comm.). The valued 'clean, green' aspect of New Zealand's identity is perhaps subliminally reinforced in the outpost's colour scheme of 'Scott Base green', though this was not the motive behind

colour selection. Relative to sprawling McMurdo station with ten times the population, sometimes likened to an 'Alaskan mining town', Scott Base does appear clean. Such matters are hot topics in online discussion forums, such as at iceboard.60south.com, where one writer recalls working as part of McMurdo's own cleanup efforts during 1991-92 involving excavation, sorting, processing and retrograding (removal) of dumps and buried trash, which the writer attributed to the effect of Greenpeace lobbying (Iceboard, 2007).

However until relatively recently, the clean, green notion was perhaps an illusion as applied to New Zealand's Antarctic operations. This changed with the advent of the Antarctica (Environmental Protection) Act of 1991; today Environmental Impact Assessments (EIAs) are carried out prior to all planned activities, waste is carried out, standard practices and protocols are in place to prevent pollution, and a comprehensive environmental monitoring programme is underway.

The current partnership between Antarctica New Zealand and Meridian Energy of wind-farm technology to develop the world's most southerly wind farm to supply both Scott and McMurdo bases will harvest energy from the natural environment without relying on traditional energy sources which contribute pollution and greenhouse gases to the environment. The scheme will also cut down on transport costs (Doyle, 2009). The New Zealand initiative is estimated to initially reduce fuel consumption by 11%, equating to a reduction in 463,000 L fuel consumption annually, between the two bases (Doyle, 2009), decreasing their environmental footprints. These improved practices and innovations do enhance the 'clean, green' aspect of the national identity and are something New Zealanders can be proud of.

A Point of Difference

Abbiss (2003) notes that it is "through comparison with other people and cultures that New Zealanders come to identify those things that they consider to be important about their own culture and values...what it means to be a New Zealander". That New Zealand takes its nuclear-free stance through to the ice "consolidates our values and shows our integrity as people" (Johnson, Pers. Comm.), with public pressure and Greenpeace action seeing through the decommissioning of McMurdo's portable 1.8MW nuclear power station "Nukey Poo", which was shut down 1972 after ten years of unsatisfactory operation. The transit of 101 drums of radioactive earth from its surrounding soil, as well as 11,000 m³ of contaminated rock through New Zealand ports (University of Auckland, 2009) was a matter of concern for New Zealanders. An online blog claims the soil was unloaded in 2008 at Port Hueneme, 105km north of Los Angeles (djiyellow.net, 2009). In 1998, after six years

(1988) the site was deemed sufficiently decontaminated for unrestricted use (University of Auckland, 2009).

Antarctica is a component of the Kiwi identity for some and not others. It is a matter of personal choice whether someone chooses to take on something into their identity, however the degree to which something can enter the mythology of a nation's identity will always depend to some extent on awareness. In this respect, visibility, accessibility and continuity of information may be key issues, with younger generations in particular unaware of the nation's Gateway status.

Despite their relative accessibility, when it comes to Antarctica, the continuity of pre-existing elements of Kiwi identity in the context of 'The Ice' has not been particularly exploited in the media. Harrowfield believes that the media give "good science coverage, but how many convey a true feeling for the place?" (Harrowfield, Pers. Comm.).

There will need to be significant engagement efforts before many New Zealanders can be sufficiently aware of their country's historic and contemporary connections, to truly be able to choose to have an Antarctic element to their national identity. In terms of New Zealand's international profile as a Gateway to the Antarctic, a step in the right direction is being taken by Christchurch International Airport Limited (CIAL), which is planning a greater Antarctic presence for the international reception area, and Air New Zealand, which is introducing regular Antarctic stories in their in-flight magazines (Johnson, Pers. Comm.).

When New Zealanders as a community take on a sense of stewardship towards the Antarctic by lobbying for its protection, then Antarctica will truly be 'valued, protected, understood'. In sharing their understanding, New Zealanders will be able to help lower the informational, social, attitudinal and behavioural barriers to world-wide human adaptation to climate change. Kiwis will truly have gained an Antarctic Gateway Identity, manifesting the principles of peace, environmental protection and international cooperation inherent in the Antarctic Treaty and Madrid Protocol.

The next section considers some ways in which New Zealand's Antarctic Gateway Identity may be furthered.

Communicating Gateway Identity through The Arts

What has been created in Antarctic Arts? A Brief History...

Throughout history, Antarctica has been imagined...waiting to be discovered...and eventually to become a part of culture (Damjanov, 2006). It was only through exploration and commercial (sealing and whaling) activities that humans drew ever closer to the continent until the first sighting was made in 1820 by Bellingshausen, Palmer or Bransfield; before this time, early representations were necessarily *imagined*.

Imagination as a Gateway to Terra Australis

Since 1486 (Andrews, 2007), Antarctica had been represented on the world map as *Terra Australis Incognita*, an unknown southern land postulated to exist by the Classical Greeks Aristotle and later Ptolomy, whose sense of symmetry guided them to a belief that the northern landmasses must be balanced by a southern one. Early scientists concurred this would be a necessary 'counterweight' to the northern landmasses. The first known literary representation of the southern land was by Bishop Julius Hall (1607) who used it as the setting for a social satire *Mundus Alter Et Idem* (Another World and Yet the Same). The period of Antarctic representation as the mythical *Terra Australis Incognita* is rich with imagery drawn from scientific reports and mariners tales of the time.

The Hollow Earth Theory

Magnetism was a popular early field of scientific investigation; thanks to the work of Descartes, it was known by 1664 that the earth's magnetic poles differed from the geographic, and varied slightly over time. He also suggested seawater diffused into massive lakes under mountains. The Jesuit Roman polymath, Athanasius Kircher also worked on magnetism (Cook, 2001), and in his 1665 *Mundus Subterraneus* (Subterranean World), published a theory that the earth was hollow. Shortly afterward, the famed astronomer Edmund Halley echoed this idea in his own work, and to explain the magnetic observations, proposed the earth consisted of a core and inner shell with their own magnetic poles, rotating at different speeds relative to each other (Halley, 1692). He suggested a luminous atmosphere separated them and that perhaps the inner earth was inhabited (Cook, 2001). He (incorrectly) thought the lights of the aurorae originated from

this subterranean source, but remarkably (and correctly) related them to magnetic fields.¹⁵

Halley's hollow earth theory (Fig. 9), more than any known facts about Antarctica itself, has proven enduringly ripe fodder for a plethora of fantasy. The American John Cleves Symmes proposed in 1818 that the earth was actually a set of five nested spheres, each with polar openings into which the sea poured, which became known as 'Symmes Hole'. He even lobbied congress to fund an expedition to the poles to investigate – which they did, and which should be considered no less extraordinary than the current funding poured into 'Life on Mars' research. The novel *Symzonia*, based on Symmes' theories, was probably the first US utopian sci-fi novel, but also a classic sea yarn, was published in 1820.¹⁶ Many believe that Symmes himself was the author, but this has not been established beyond a shadow of doubt.

Edmond Halley and the magnetic field of the earth



Halley with a sketch of his shell model of the Earth.
In the Royal Society (Michael Dahl).

Fig. 9. Edmond Halley contributed the Hollow Earth theory to Antarctic arts.

Secondary Experience as a Gateway

As human contact with the south polar region developed, information came to public light of the real sights, conditions, and adventures of voyaging by sea, land and air. These accounts were combined with Hollow Earth theory in the popular consciousness. As an example of the ways in which reports of sea voyages and Symmes' theory inspired by Halley, fed into further works of fiction, Edgar Allan Poe's novel *The Narrative of Arthur Gordon Pym of Nantucket* (1838) takes its inspiration from Symmes' theory of 1818, Seaborn's *Symzonia* (1820) and Benjamin Morrell's *Narrative of Four Voyages to the South Seas and Pacific* (1832), and Jules Verne's *Le Sphinx des Glâces* (1897) is the gothic fantasy sequel to *Arthur Gordon Pym*. Some of the early explorers (e.g. Taylor and Debenham) took Poe and Verne with them to Antarctica (Manhire, 2004). One need not go further, as the Hollow Earth genre proliferated and endures today.

¹⁵While Cook (2001) suggests it is unlikely Halley was familiar with Kircher's work, it seems possible since Lopez (1997) notes that at the time, English diplomats in Italy were in touch with both Kircher and the Royal Society, though the society tended not to give fair estimation to Italian science.

¹⁶ This was the same year the Antarctic continent was first sighted by James Clark Ross.

Gradually the theoretical extent of *Terra Australis* was diminished from its theoretical union with Tierra del Fuego, by sighting of sub-Antarctic islands (Ile Amsterdam, 1623; South Georgia, 1675), the crossing of the Antarctic Circle (Capt. James Cook, 1773), discovery of the South Shetland Islands (1819) and finally the first continental sighting in 1820. As the reports from these voyages provided increasing fodder for writers, realism crept into Antarctic arts – to varying degrees.

Nowadays, information on Antarctica is readily available wherever online or library access can be found. Increasingly realistic, well-researched settings and detail have been used for informing fictional tales with an Antarctic context, such as Thomas Kenneally's *Victim of the Aurora* (1977), Ursula Le Guin's *Sur* (1982), Laurence Fearnley's *The Piper and the Penguin* (1998), and H. P. Lovecraft's *The Thing on the Doorstep and Other Weird Stories* (2001).

Others, however, appear to have done little research or none at all, and the Antarctic references are very inaccurately portrayed; when such works become popular they can mislead the public to strong preconceptions about aspects of Antarctica. Inadherence to the truth however allows for exaggeration of traits to create interesting characters. An example of this is the portrayal of skuas in *Happy Feet* as mean and nasty. The skua is now a widely misunderstood bird; it is only trying to survive in what is, after all, the world's harshest continent!

Still others 're-tell history', and Manhire (2004) makes that point that this is best done sympathetically, since little could match or enhance real narratives such as those by Cherry-Garrard or Shackleton. Successful examples are Vladimir Nabokov's one act play *The Pole* (1924) and Douglas Stewart's radio play *The Fire on the Snow* (1964) – both centred around the final hours of Scott's Polar Party – and Beryl Bainbridge's *The Birthday Boys* (1991).

The John Mills film *Scott of the Antarctic* was also the instigator for the key early piece of Antarctic music in the score which Ralph Vaughn Williams composed for it. Full of violins, angular, stark sounds...as it was so widely seen at the time of its release, this film score has coloured heavily people's preconceptions about what Antarctic music should sound like. Vaughn Williams later followed up his score with *Sinfonia Antarctica*, which brought Antarctic audio imagery to the orchestral stage.

Some however, cannot help but mock or even 'take the piss'; Monty Python's *Scott of the Sahara* being one.

Primary Experience as a Gateway: The Evolving Role of the Antarctic Artist

Artists have been travelling to the Antarctic since the early expeditions, but their role has changed markedly over time. Vance (Pers. Comm.) made the point that the expeditions of the “Heroic era” had their own artists, the “Developing era” had military artists, and the “Modern era” has residencies (Vance, Pers. Comm.).

The Official Artist

The Cook era of the Enlightenment introduced artists and intellectuals as crew members, indicating the transformation that had occurred during the Renaissance, which had raised Nature and natural philosophy up on a platform and informed representational art with mathematical and scientific principles (Pyne, 1986). As discussed, the first artworks based on a direct experience of Antarctica did not emerge until after the first continental sighting in 1820. The role of artists in these early expeditions was purely functional; their purpose was to create scientific illustrations for the research work undertaken, chart coastlines, and to record and document the expedition. Figure 10 sketches out the early period of Antarctic arts from the cartographers to the key artists of the early expeditions.

William Hodges¹⁷, who accompanied Cook on his second voyage (1772-75) produced beautiful paintings with consummate perspective, but which also had a new sensitivity and Romanticism about them. He was the first to paint icebergs (which he called “Ice Islands”). Hodges is also said to have pioneered *en plein air* painting, which was to affect the development of Impressionism and subsequent modern European painting (Smith, 1992). The way the travelogues of Cook and Forster were received ‘back home’ transformed popular conceptions of boring travel into exotic voyages, and representations of nature became representations of morality; it was the beginning of the Romantic era (Pyne, 1986).

Through the next hundred years the role of the official artist remained much the same; scientific drawings were still heavily emphasised as science was often a key driver for voyages, but with the Nares expedition (1872-76) photography was introduced to the Antarctic. They often also had other responsibilities as a crew member, for example, Edward “Bill” Wilson was doctor, biologist and artist on Scott’s *Discovery* Expedition (1901-04), and on the *Terra Nova* Expedition (1910-13) he was head of Scott’s scientific staff (Andrews, 2007). This expedition included an official photographer in Herbert Ponting, who was closely followed by Frank Hurley, official photographer for Mawson’s

¹⁷ Hodges is well-known in New Zealand for his paintings of South Island inlets such as Dusky Bay.

1911-14 expedition. Ponting and Hurley immortalised the Heroic era expeditions (Andrews, 2007), creating some of the most unforgettable, iconic images which for many people have heavily shaped their preconceptions of the Antarctic. Considering Ponting's eye for dramatic composition and Hurley's stage-managing tendencies it's no wonder then that some feel the actual Antarctic experience doesn't seem to match up with the most well-known photographic representations. Like Scott's diaries, much of the arts produced in the Heroic era were created with a strong sense of audience, to which they imbued their works with strong Victorian values such as bravery and heroism. Photography as the preferred documentary tool grew to dominate Antarctic image-making through most of the 20th century (Andrews, 2007).

In the Military era, the artists were often the official airforce artist. For example, in 1970 and again in 1974, Maurice Conly, an official Royal New Zealand Air Force artist, travelled to Antarctica.

The Casual Artist

Early expedition members including the explorers themselves, produced photographs, artworks and books, as have members of base staff in the modern era. The process is a way of processing, assimilating, ordering and expressing their experiences. The works of the casual artist may be undertaken to assuage boredom, or instead the product of spontaneous compulsion to express or capture something that perhaps inspired them.

Some casual artists went on to become professionals, such as the New Zealand journalist Graham Billing (1936-2001), who spent 18 months at Scott Base as their PR officer and handyman. During this period he wrote his first book *South: Man and Nature in Antarctica: a New Zealand View* (1964). He continued to return to the frozen continent in his imagination, publishing and broadcasting parts of his Antarctic journal in *Landfall* and on Radio New Zealand, and later writing the novel *Forbush and the Penguins* (1986). A philosophical and symbolic focus are characteristics of his literary style (NZBC, 2009).

What is uniquely expressed by these artists remains to be appreciated since the works have never been gathered together for public exhibition. This appears to be the least valued output of Antarctic art, but in its lack of guile or sense of audience, perhaps it can tell us something unique about the human experience in Antarctica.

Fig. 10. Early 'Official' creators of Antarctic arts.

	PHILOSOPHERS & CARTOGRAPHERS			OFFICIAL ARTISTS											
ERA	Imagination		Early Era							Heroic Era					
EXPEDITION	<Egypt>		Cook	D'Urville	Wilkes	Ross	Nares		De Gerlache	Scott	Shackleton	Scott	Mawson	Shackleton	Mawson
TIME	c.150 AD	1486, 1579, 1637-57	1772-5	1837-40	1838-42	1839-43	1872-76	1876	1897-99	1901-04	1907-09	1910-13	1911-14	1914-17	1929-31
Maps	Ptolomy	Ulm, Ortelius, Hondius-Jansson													
Writing										Wilson	Shackleton ¹⁸	Cherry-Garrard			
Visual Arts			Hodges ¹⁹ , Forster, Roberts	Le Breton ²⁰	Wilkes, Peale	Hooker, Davis	Wild, Moseley	Doré ²¹	Borchgrevink ²²	Wilson	Marston	Wilson, Cherry-Garrard	Harrisson	Marston	
Photography							Crew ²³					Ponting ²⁴	Hurley	Hurley	Hurley

¹⁸ Responsible for the first book to be published in Antarctica.

¹⁹ The first depictions of icebergs (“Ice Islands”).

²⁰ Some of the finest scientific illustrations ever made.

²¹ Illustrated the first Antarctic poem: Coleridge’s *The Rime of the Ancient Mariner*. Inspiration from Cook’s second voyage.

²² Painted himself as the first to land on Antarctica, a claim disputed by Norwegian and NZ fellow crewmen. Also the first winter over.

²³ The first Antarctic photography.

²⁴ With Hurley, established photography as an Antarctic artform.

Contemporary Artist Programmes: Manufacturing Artistic Opportunities

Today several Antarctic nations run arts programmes, such as the USAP and Australian Antarctic Division; the most recently launched was the British Antarctic Survey's Artists and Writers Programme in 2001. New Zealand has run its own versions since 1997.

It is understood that New Zealand has a developed arts audience. A Creative New Zealand report, 'New Zealanders and the Arts: Attitudes, Attendance and Participation in 2005' noted that 50% of New Zealanders actively participated in the arts during that year, and that for 56% of New Zealanders, the arts are part of their daily lives, illustrating that Kiwis are "generally strongly supportive of artistic activities and recognise the value that the arts brings into their lives" (SOUNZ, 2006).

To the benefit of this supportive arts audience, New Zealand's identity as a gateway to the Antarctic is being forged through its growing body of Antarctic art, through the Artists to Antarctica programme. In a media release, Creative New Zealand CEO Stephen Wainwright said "The Artists to Antarctica programme brings together art, science and the natural environment to encourage the creation of innovative New Zealand art" (Antarctica New Zealand, 2007).

Direct Antarctic experience can have profound impacts on the artist and their work. Not only do Antarctic arts become an accessible gateway for the public to experience Antarctica vicariously, but the artists themselves often become a gateway, as educators in the primary, secondary and tertiary education system, and through giving lectures and public talks. They contribute to New Zealand's Antarctic identity and communicate this internationally when they and their works tour the world.

Antarctica New Zealand's Artist and Media Programmes: Overview

New Zealand has been sending artists to Antarctica since the 1970s, but as part of an official programme, only since 1997. Today, Antarctica New Zealand runs two artist programmes side by side; the Invited Artists Programme, and the Arts Fellowship, marketed as 'Artists to Antarctica'. Both only accept New Zealanders. The overall goals of the arts programmes are the same as the media programme, such as to embed Antarctica in the culture of New Zealand, and to communicate that New Zealand has a presence in the Antarctic. This requires a goal of placing Antarctica consistently in the media (Vance, Pers. Comm.).

The media and arts programmes combined require less than 1.2% of all the human resources sent to the ice; a minimal cost (Vance, Pers. Comm.). The key difference between the two is that with a media placement, Antarctica New Zealand can proscribe exactly what the output will be; it is a commissioned approach and an outlet for commercial artists (Vance, Pers. Comm.).

However, some media placements also contribute to the arts legacy; the legendary work of photographer Andris Apse is an example of this, as is filmmaker Mike Single, whose 12-minute introductory film on the Antarctic environment is screened on loop at the Antarctica Attraction. Another example would be journalist Jane Ussher, who had a specific brief regarding publications to write articles for, but who has also fulfilled a gap in portraiture photography (Vance, Pers. Comm.).

Through Antarctica New Zealand, many artists have now journeyed to the ice; they are chronicled in Appendix 1.

The Arts Fellowships Programme

Origins

At the 1996 Antarctic Treaty Consultative Meeting (ATCM), Resolution 2 was adopted that artists have a place in Antarctica. The New Zealand Antarctic arts scheme was mooted at a board meeting late in 1996 as part of a draft education strategy, which noted that “an opportunity exists for New Zealand to contribute positively to the treaty interest in this issue” (Ryan, Pers. Comm.). The instigator was Chris Mace, a board member and well-known New Zealand philanthropist. When he transferred to Antarctica New Zealand, Tim Hyman brought the framework over from the Department of Conservation (DOC), which already had an established artists programme to the subantarctic islands. Lou Sanson, Hyman’s boss at DOC, also later moved over to Antarctica New Zealand where he is the current Chief Executive Officer (Vance, Pers. Comm.). Thus, the artist programme has received strong support from the outset, from people who understand its capabilities.

By this stage, several treaty nations had developed artist programmes as a formalised extension of the existing artistic output, which had been associated with Antarctic expeditions from the earliest times. Both the Australian and New Zealand Antarctic programmes have a vision statement of Antarctica ‘valued, protected, understood’, and the arts programmes are a vehicle for furtherance of this goal, by building up an Antarctic art asset which can engage audiences beyond science.

The Process of Selection

This programme is a partnership between Antarctica New Zealand and Creative New Zealand, who administer the application process, treating it as a special kind of artists residency. Creative New Zealand have their own mandate; while reputation of the artists is a factor, developing and mid-career artists are targeted (Vance, Pers. Comm.; La Roche, Pers. Comm.).

In terms of the selection process, Creative New Zealand also “do most of the choosing” (50-90%; it varies) (Vance, Pers. Comm.), but since safety in the Antarctic is paramount, consultation with Antarctica New Zealand is also involved, such as in determining medical standards required for an individual's suitability for travel to Antarctica.

Because an application process is involved, this does influence those who will apply.

The Process of Review

On return from the ice, artists must file a “Logistics and Event Report”; this is standard for all expeditions (called ‘Events’) supported by Antarctica New Zealand. From then, artists are however given plenty of space. From Antarctica New Zealand's perspective, artists need to have a significant amount of time in order for their experience to filter through to them – it is recognised that this can take two years. There is no intention to police an artist's output; non-production is a risk but it has never happened in 50 years of supporting artists on the ice. The focus is instead on relationship-building.

Creative New Zealand have their own accountability process, but the Arts Fellowship programme is currently in a three-year hiatus (2008/09/10). This does not mean it is concluding; there will most likely always be an artist programme (Vance, Pers. Comm.).

The Invited Artists Programme

A recent article reports the aim of the programme is “to increase New Zealanders' understanding of Antarctica's value and its international importance through the work of our top artists” (Antarctic, 2008). Antarctica New Zealand CEO Lou Sanson is quoted as saying “This programme gives New Zealand artists a rare opportunity to explore the concept of Antarctica and the world-leading science programme we have down there...We hope that the experience of living on the ice will open new doors for our artists and inspire them to expand their creative work. It also allows New Zealanders to discover the amazing Antarctic environment through the eyes of our artists. It's the mixing of art, science, and

the power of the Antarctic landscape that make this residency truly unique” (Antarctic, 2008).

As only the top echelon of New Zealand artists are targeted, the key goal of the Invited Artists Programme is to raise the profile of Antarctica New Zealand (Vance, Pers. Comm., Ryan, Pers. Comm.). The programme began with Grahame Sydney in 1997, and this has been very successful: “everyone knows Grahame Sydney went to Antarctica” (Vance, Pers. Comm.). While the potential for an artist to offer a creative perspective on science and environmental issues is a consideration, it is not the central concern. The key issues are that the artist must be high profile and must have the capacity to handle Antarctica (Vance, Pers. Comm.). The selection process involves shortlisting by an advisory panel, with Antarctica New Zealand making the final decision. Vance says “there is never any lack of people on this list” (Vance, Pers. Comm.).

Antarctica New Zealand gets maximum value for minimum input with this programme (Vance, Pers. Comm.). The normal stint on the ice is two weeks, utilising Antarctica New Zealand’s ‘downtime’ in December. Efforts are made to get the artists in before the sea ice breaks out, so that overland travel is possible without the added cost of requiring helicopter transport between sites they need to visit (Vance, Pers. Comm.).

While no brief is given to the Invited Artists, it is hoped that they will want to produce some work which could highlight the scientific and environmental connections of the Antarctic. To support the artists’ ability to make valid artistic commentary on science and the environment, artists are “given a direct feed” (Vance, Pers. Comm.), being exposed to the research undertaken and ensuring their questions will be answered. The 2008/09 austral summer is the first season that the Invited Artists have been chaperoned. This new development was a response to the sense that hosting was needed to provide the maximum experience through education on the environment and the rules of Scott Base life (Vance, Pers. Comm.).

The Invited Artists over this most recent period were photographer Boyd Webb, shortlisted for the Turner Prize in 1990, and author Lloyd Jones, winner of the 2007 Commonwealth Writers’ Prize, Montana Medal for Fiction 2007, Kiriama Prize for Fiction 2008, and shortlisted for the Man Booker Prize 2007. Vance considered the chaperoning very successful as “they had a question every two minutes” (Vance, Pers. Comm.).

The Artist's Call to Antarctica

For composer Patrick Shepherd, a love of the ice and snow, and childhood memories of the light associated with it, were factors in wanting to go to a place that “seemingly has little obvious stimulus” (Shepherd, 2006). He noted that reading up on the “legendary figures” of the heroic age of Antarctic exploration had provided a “rich narrative on the extremes of human endurance” (Shepherd 2006), through which he found a resonance with the words of Scott, who said, “It is not what we see that inspires awe, but the knowledge of what lies beyond our view” (Shepherd, 2007). As a composer, Shepherd was attracted by the challenge of translating the “limited visual palette into sound” (Shepherd, 2007).

The Artistic Response to Antarctica

Unexpected Discoveries

Shepherd (2006) noted that “no amount of reading prepares you for the actuality of Antarctica – the whites, the blues, the blacks, and the bone-chilling cold that can sweep through you only minutes after you’ve been bathing in gloriously bright sunlight.” Chris Cree Brown commented that the Antarctic was “vastly different” from what he imagined - “bigger, whiter, more magnificent. There could never be a slide that could capture the majestic spectacle...and even with a 360-degree pan, a video could never realise the sheer scale of the landscapes” (Shepherd, 2006).

This was echoed by Phil Dadson, a composer who travelled to the ice in 2003, who said “the actual experience far surpassed any imaginings, especially those in the Dry Valleys. Nothing prepared me for the pristine temple-like atmosphere of one stone valley floor in particular, which I nicknamed ‘valley of the gods’” (Shepherd, 2006). Composer Gareth Farr made the journey south in 2006, expecting a geographical landscape but finding a foreign culture. While it was ‘profoundly Kiwi’ at Scott Base and American at McMurdo Station only 3km away, there was an “overriding Antarctic culture” comprising the shared understandings necessary for existence in a “space station-like environment.” In going to Antarctica, Farr was also struck by how “scary...fierce, unrelenting, and non-negotiable” the world is, yet fragile at the same time (Shepherd, 2006).

The Artistic Process: Framing Antarctica

Humphries (2000) proposes that the struggle to “skillfully transform the medium from its present, imperfect state into an ideal state seen in the imagination” underlies all true art. He argues that the artistic process is “an approach to problem solving that complements the scientific method and facilitates progress and innovation...it is not confined to the arts, nor is it always present in them...[it] transcends subject area” (Humphries, 2000). It can be described as a process of imaginatively framing a subject, though the debate of defining the ‘Artistic Process’ is as endless as the debate surrounding ‘What is Art?’.

For each artist, the artistic process manifests in different ways, however the uniqueness of the Antarctic context is such that it can confront established ways of interpreting the world and one’s place in it, demolishing preconceptions as to what the experience would be like. At a panel discussion at the Adam Gallery, Victoria University of Wellington in 2005, Bill Manhire made the point that experiencing Antarctica offers a real, rather than abstract, understanding of how imaginatively framed the rest of the world is. Manhire said that “Antarctica is the closest thing” to experiencing the world before it has been transformed and shaped by the human imagination, on which he said, “it was both exhilarating, and terrifying.” It is a pre-human landscape; the only continent where humans actually “bounce off” (Vance, Pers. Comm.), requiring imported supplies and equipment to sustain human life there.

Being so uniquely unframed, the creative challenge is therefore one which requires artists to find a way to “see the place without loading onto it all the prior emotional information you bring with you” (Manhire, 2005), and then a way in which they can imaginatively frame it. The choice of subject matter impacts heavily on the way this can be achieved. In such an alien context, the smaller the scale of the subject, the more manageable a framing. For example, if the landscape is the subject, while certain parts propose their own frames (such as the Dry Valleys, “places which have shape and texture and familiar perspectives” (Manhire, 2005)), where there is only an expanse of ice and sky, the challenge is much more difficult. “I don’t know what you can begin to do if you are put down in the middle of the Ross Ice Shelf; or up on the polar plateau” (Manhire, 2005).

There are personal challenges to overcome in being in Antarctica, stemming from the isolation, the unfamiliar social environment of Scott Base and field camps, and questions of the validity of their presence – non-scientific purposes can be perceived by some as touristic. Such questions can arise as ‘will my art justify me being here, taking up a bed

and resources?', 'will I do justice to Antarctica?', 'will my art justify my environmental impact?'.

Arts involving a degree of representation, especially those which involve technology-dependent processes, such as video and photography, inherently impose their own frames, so pose challenges more of a practical, strategic and personal nature. But interpretive processes such as music and creative writing, which seek to *translate* a visual or experiential landscape, present additional challenges, because the uniqueness, or 'alienness', of the Antarctic subject will not cooperate with the standard means of interpretation one has developed previously; it eludes some senses, deceives others, and baffles the brain.

Light is not only external, but luminous. Colour appears to be lacking, but in some places, is in fact present in myriad ways at resolutions finer than 'first glance', and atmospheric phenomena such as the iridescent Polar Stratospheric Clouds will be entirely new experiences for most. Perspective and scale are lacking, owing to the absence of visual reference points and multiple horizons (Yarrow, 2008). Some feel it does not even cooperate with language.

Writing on the horrors of the winter journey to obtain Emperor Penguin eggs from Cape Crozier, undertaken by Apsley Cherry-Garrard, Dr. Edward "Bill" Wilson, and Lieutenant Henry "Birdie" Bowers during Scott's *Terra Nova* expedition (1910-13), Cherry-Garrard said "This journey has beggared our language". As highlighted by Manhire (2005), many early travellers used "linguistic stickers" from their own imaginative worlds, in words such as 'desolate' or 'sublime'. Yarrow (2008) emphasised the inadequacy of language. A character in contemporary writer Kim Stanley Robinson's²⁵ novel *Antarctica*, said "Before you can read a landscape it has to become part of your inmost heart...I saw the land and it baffled me, and I could not paint it in my poems. Nothing came to me. Only later as I dreamed of it, did I grow to love it. What words I could find were the oldest words in their simplest combinations. Blue sky, white snow. That is all language can say of this place. All else is footnotes and the human stories" (Stanley Robinson, 1997).

²⁵ Kim Stanley-Robinson's work has been dubbed "literary science fiction". Born in 1952, he is a member of the Mars Society, and themes which recur in his work are ecological sustainability and sociological interactions, such as in his futuristic novel "Antarctica" (1986), dealing with scientists in an extreme environment threatened with destruction by post-Antarctic Treaty corporate interests.

The overwhelming impression of Antarctica's purity can also be a challenge to overcome. Manhire said: "Art thrives on impurity...[I believe] in the artist as scavenger and bricoleur...artists need a good deal of human mess" (Manhire, 2005).

Altogether, these barriers to accurate representation and translation has led many people to feel that Antarctica doesn't offer anything; sink-like, it simultaneously reflects and absorbs (Pyne, 1986); it seems to await inscription, but constantly erases itself with each new snowfall (Manhire, 2005). It allows you to bring your preconceptions, but destroys them. So what one brings to Antarctica and to Antarctic arts, *must arise from within oneself*, in response to Antarctica itself.

In order for Antarctic arts to perform a gateway function, for an audience to have the chance to experience Antarctica through the arts, to become aware of it and consider the ways in which Antarctica may impact on their life, the artist has first had to overcome many challenges including seeking new frames through which to realise their art.

The Challenges of Creating Art in Antarctica

Logistics

In Antarctica, one is at the mercy of the weather, and so cannot always go where or when planned. Schedules can also change at the drop of a hat depending on transport options available, as some forms of transport are in high demand – and artist transport is often not a high priority when compared to the operational requirements of scientific research projects.

Outdoor Conditions

The typically sub-zero temperature has several consequences. Batteries go flat very quickly and must be kept at body temperature to last. Standard camera film can tend to snap when wound (ANZ field manual). Paint freezes. Fingers become numb with the cold, making sustained periods of outdoor arts practice difficult. The wind can blow you and your materials over, and katabatic winds resulting from a pressure change permitting ice-crystal-laden air driven by gravity to rush down from the Trans-Antarctic Mountains and across the ice shelf, can feel like mass involuntary acupuncture.

Capturing the Experience

With artist stays in the New Zealand artists programme generally being only a couple of weeks' duration, time becomes of the essence. It is therefore important to find means in which to capture aspects of the experience as source material and material for future reference. To this end, artists employ various tools. Patrick Shepherd, a composer, used recordings, video footage and pencil sketches. Sonic artist Phil Dadson brought high-quality sound and video capture equipment to the ice, ready to record any sounds and images that caught his attention, or to capture ideas for performance pieces utilising science staff (Shepherd, 2006).

Active participation in a diverse programme of activities represents an opportunity for the experience to be crystallised in vivid memories. Shepherd said he used his time in Antarctica "to absorb the experiences" (Pers. Comm.). "I met some fascinating people and their stories became integral to my Antarctic experience, as did camping in tents, making ice caves, traversing huge crevasses, sliding down icy slopes with only an ice pick to slow me down and taking my first rides on a helicopter. It was all exhilarating stuff and a rich source of inspiration for much of my compositional work since the trip" (Shepherd, 2006).

Much of Phil Dadson's work was opportunistically created in Antarctica, utilising scientists to provide "a direct channel" into the working process, such as by bouncing sounds off the landscape, creating an echo performance piece (Shepherd, 2006). In contrast, Shepherd created his works after he had returned home and begun to assimilate the experience.

Manhire (2005) noted various ways painters and poets imposed frames as their tool - Nigel Brown painted frames which would go inside the work's eventual real frame; Dick Frizzell focused on the explorers' huts; Manhire found himself using rhyme, "...as if I was trying to find a way of asserting order and harmony in a place which didn't guarantee any of that stuff" (Manhire, 2005). Little contemporary arts have focused on the human stories, which Manhire (2005) suspects will continue to develop.

...And After Antarctica

The task of interpreting, expressing or reflecting the Antarctic experience in music can be daunting, overwhelming even... “How am I going to make sense of it? You are literally walking in the footsteps of giants”, commented Shepherd (Pers. Comm.).

Composers Shepherd, Farr and Cree Brown have all commented on the creative challenge posed by Antarctica. Instead of being so full of inspiration that “the Antarctic juices would flow freely”, Patrick Shepherd unexpectedly found himself facing a block that lasted six months.

Cree Brown felt the difficulty in capturing the aural landscape of the Antarctic lay with its “apparent incongruity” with the visual landscape; while vistas suggested grand, slow, and densely textured music, the audio reality was “the antithesis”, with perhaps an exception in the Skua, which provided a “sonic analogy” with its “long, plaintive cry” (Shepherd, 2006). For Shepherd, it was a preconception of the nature of the visual experience which ultimately posed a problem. He considers that one cannot help but be affected by experiencing Antarctic music prior to a visit; such as the score to the John Mills film, ‘Scott of the Antarctic’ (Shepherd, Pers. Comm.). His proposed project was originally conceived through the imagery of Antarctica, but he found this to be colourless, and “...how does a composer create a work where the purpose is to present a lack of colour?” (Shepherd, 2007).

To Shepherd, its dominance over the limited soundscape of skua, penguins, wind, and human activity provided a limited fallback option. The “saturation of information” even extended to the sense of smell; Patrick only recalls the smell of the Cape Royds penguin colony and diesel exhausts from generator and vehicle (Shepherd, 2007).

Shepherd found a way around the block he experienced by focusing on the little things, human-interest aspects he calls “minutiae”. He said “Science was a huge help, explaining Antarctica in terms other than feeling and colours. From that I was able to move away from an instinctive, aesthetic reaction and focus more on scientific ideas and concepts, developing works based on microviews rather than majestic vistas” (Shepherd, 2007). In searching for a means of interpretation, Shepherd took his cue from other ways in which visual arts and music have found a relationship with each other, noting the parallels between their common terminology such as colour, shade, texture and harmony, and the rich history of association of colour with sound that extends from composers to inventors, artists and scientists. Colour-hearing as a form of synaesthesia was illustrated by Ludwig van Beethoven, who once described B minor as being black, Messiaen and Alexander

Scriabin composed with heavy reference to colour, and the theory was developed through the invention of various instruments were invented of the Rimington colour organ, clavilux, and ocular clavichord. Sir Isaac Newton also drew a relationship between the colours of the rainbow and notes of the diatonic scale.

All this presented further problems, however - "How many musical tone-colours are there for white?" (Shepherd, 2007). Not wanting to accept Rimsky-Korsakov's allocation of C major as symbolising white, Shepherd felt white would be more truly expressed by the absence of chromatic colour, so strove to compose without key signature. He also decided to maintain a lack of accidentals (sharpened or flattened notes), since he believed that this would better "...infer a certain emptiness and also a certain brightness which is more in keeping with the Antarctic landscape than any other colour-key relationship...that opaque luminescence which is the basis of Antarctic colouration..." (Shepherd, 2007). Thus, in science, Shepherd found a foothold, a creative intellectualisation with which to overcome his block.

Antarctica is a vacuum of nothing which sucks and strips away all your somethings until you have nothing, nothing and more nothing. It is the opposite of a non-experience; nothing is FELT. Your something now IS a nothing. You are acutely aware of your new-found bareness, dwarfed by the universe (Taylor, 2009).

The artists' experience can take a long time to process; Antarctica New Zealand finds that two years is a typical timeframe for works to emerge (Vance, Pers. Comm.). Dadson found that it took two years "and then some" to complete his Polar Projects Series, consisting of seven works (Shepherd, 2006).

Dadson's recordings undergo varying degrees of manipulation, such as moving sound source, before synching with visual images which may have also undergone manipulation; some link in with each other, while some are conceptual and can be experienced independently (Shepherd, 2006). I found his works a surprisingly disarming take on human interaction with the Antarctic environment, since they were infused with an impish, playful and delightful personality I assume is his own, but which, not having met him, may be a characterisation.

To Cree Brown, struggling with the incongruity of the visual and aural landscape, digital manipulation of the actual sounds seemed contrived, so he ended up using them in a mostly natural state but "reticulated" into abstract material from non-Antarctic samples (Shepherd, 2006).

Farr found it was easier to focus on reflecting the human history over the last 100 years, rather than the memories of his personal experiences (Shepherd, 2006).

The Impact of First-hand Experience

...On the Artist

A trip to the ice can have a profound effect. Patrick Shepherd has learned that “Antarctica breeds obsession” (Pers. Comm.), and he did not expect that Antarctica would become an all-consuming passion (Shepherd, 2006). He feels that modern life squeezes reflection out of you; Antarctica gives that back, and said “you think on a bigger canvas, but you speak in shorter sentences...or not at all” (Shepherd, Pers. Comm.). Since his visit he has also noticed he spends an unprecedented amount of time reading and has developed a parallel interest in the Arctic (Shepherd, Pers. Comm.).

Textile artist Clare Plug says her fellowship was “a wonderful magical enriching experience that continues for me and I am sure will be a continuing one...I have also learned a huge amount about the science projects going on there and continue to follow them with great interest. I have become much more concerned about the impact of climate change and more ‘aware’ of the political issues associated with this” (Plug, Pers. Comm.). She said “I have come to understand that my trip south was just one aspect of my continuing Antarctic experience, which has included attendance at the Antarctic science conference in Wellington, also an Antarctic Society weekend, involvement with the NZSO Antarctic Festival week and all sorts of lectures, films and exhibitions since. And of course in the process of making my art I get whisked right back there in my mind. It is now just up to me to enrich the experience for myself!” (Plug, Pers. Comm.).

Both Farr and Cree Brown found their outlooks on ecology changed, with new perspectives on the fragility of the planet. Farr commented that “if something...so invincible, so powerful, and so eternal can be falling apart because of what us humans have done in the last hundred years of so, then we have really screwed up badly.”

In discovering Antarctic art, do we discover ourselves? “Perhaps this holds true for anyone who studies, has a passion, who goes somewhere and is influenced by it” (Shepherd, Pers. Comm.). Antarcticans can experience a metaphysical awareness of their relationship to the universe; Dadson reported feeling “awestruck with a physical sensation of me as a tiny dot on the earth turning around the sun”. His trip to the ice imparted a sense of urgency over the “politics of impermanence” (Shepherd, 2006). At Scott Base

you “become aware of the bare essentials of life” such as food, drink, the weather and your health. The unusual dependence on others for one’s safety and survival was something he found precious and refreshing (Shepherd, Pers. Comm.).

Author Margaret Mahy said that “Visiting the Antarctic is the closest I will ever get to being on another planet. It is not a natural place for humans to be. One is constantly reminded of this, by simple things like the clothes one is obliged to wear when going outside, and the problems inherent in movement from place to place, though at the same time one is also reminded of the human ingenuity and determination that makes an Antarctic visit possible” (Mahy, Pers. Comm.).

Cree Brown was impacted by the absence of ‘noise’ in Antarctica. He told Shepherd (2006) that “Ours is a world where noise and its insidious psychological consequences on humanity has largely been ignored. Antarctica, by contrast, appears as a near pristine environment, not only with regard to its visual and physical environment, but also in its sonic landscape. The tranquillity in Antarctica is unfamiliar and, as a consequence, marginally disturbing, especially when it is exacerbated by the absence of ambient sound.”

Musically speaking, Antarctica has a different rhythm of life. “Down there you are conscious of a greater rhythm; life moves to a different beat”. Shepherd has composed pieces based on the call and response in the penguin colony and the rhythm of the “chopper blades” (Shepherd, Pers. Comm.). The sense of space poses challenges to your perception, even the vehicles are out of scale to what you experience at home, e.g. “Ivan the Terrabus”, a transporter running between McMurdo Station and Williams Field airstrip on the ice shelf (Fig. 11).



Fig. 11. The author at McMurdo Station, next to “Ivan the Terrabus”.

The experience of discovering an obsession with the Antarctic is not one unique to the artist. Shepherd said “I don’t believe a scientist doesn’t have a feeling about what it looks like” (Shepherd, Pers. Comm.). Indeed, scientist and historian David Harrowfield openly admits the depth of his empathy for all things Antarctic. “I’m totally besotted” (Harrowfield, Pers. Comm.). Harrowfield befriended Hillary when he was 14 years old, and his connection to the Antarctic began as a climber in the late 1950s. A veteran of nearly 40 trips to the Antarctic and keen advocate of stewardship, he says “Eventually you get to the point where you can’t go again. You wonder ‘Am I gone forever?’ But there are so many people to see and talk to...”, so he still stays in touch. “Like Shackleton said, ‘There’s a longing to return again and again’...very few never want to go again” (Harrowfield, Pers. Comm.).

The artist’s experiences will find an easy resonance with those of many Antarcticans. One Antarcticans has written extensively on Antarctic culture, and considers that like the scientists many support people also return year after year, to whom a saying applies: “The first year they go for the adventure, the second year they go for the money, and the third year (and forever after) they go because they’re so screwed up they can’t work anywhere else”; he notes this means they are hooked not only on seasonal employment, no expenses, and plenty of time off to explore the world, but no rush hour traffic, and that the bottom line is Antarctica itself; tedious aspects of bureaucracy are outweighed by “the magic of the place itself...there’s no more beautiful or challenging place on Earth, and it continues to pull at the heart of anyone who has been there” (www.antarcticaonline.com).

Shepherd cites Antarctica as the only place he’s been homesick for as an adult; for Dadson, he would go back “at the drop of a hat”; for Cree Brown and Marcus Lush, “in a heartbeat” (Shepherd, 2006; Ice, 2008). Not every artist, nor every Antarcticans, has an experience this strong; but many do.

...And on their work

Did the Antarctic experience change their style? Farr did not find it influenced his compositional styles (Shepherd, 2006), but Shepherd feels his work has become more austere (Shepherd, Pers. Comm.), and he noted that while he thought he would be inspired by the big things, it was in fact the little things that inspired him (Shepherd, Pers. Comm.). For Shepherd, Antarctica’s barrenness did eventually breed artistic fertility. He notes that “the environment of sensory deprivation” influenced and shaped his work, and he found creative ways to transcribe such “diverse elements as landscape, history, colour (or absence thereof) and natural phenomena (such as wind) into a satisfying musical and poetic form” (Shepherd, 2007).

Sydney found that, as a result of the experience, the old adage 'less is more' bore out for him with remarkable impact. "My experience made me feel that I could get far more out of far less subject matter." He said "my subsequent work...has often been a result of that lovely discovery. You don't need more going on...the Antarctic theatre brought that home to me in a way I wasn't expecting" (Sydney, Pers. Comm.).

Do artists feel that first-hand experience gives their work greater validity/credibility? Textile artist Clare Plug agrees, saying "I believe so and really hope this will be apparent in my artwork, will give it greater authenticity and impact, that it will be able to affect people more as a result." Looking back on her original ideas prior to going, she says "now I see how simplistic they were", noting also, that since 2005 people's understanding of climate change and "also perhaps Antarctica's significance in aiding our understanding of that" has changed a lot. "So if I had just made my artwork from imagination and reading, seeing others' images...I am sure it would have been simplistic too. I hope I am now creating works that go beyond the trite and tried, the stereotypic views. I hope to challenge the viewers to stop and look and think a bit, to take more than a passing glance" (Plug, Pers. Comm.).

Mahy also felt so; "In my case direct experience added hugely to my previous perception – my previous awareness...there are parts of my book I could have written from research, but there are parts that could only spring from first hand experience" (Mahy, Pers. Comm.).

While some artists draw on their imagination to create Antarctic arts, and others may draw on historical accounts, Sydney highlighted that for an artist like him ("I'm not for the imagination"), first hand experience is the only thing he relies on. "It may not be the only way for other artists, but for me it is the only way. My art is always based on experience. [Over time] you have a clear sense of your own signature, I would never call it a 'vision'...I know what my instincts are, and I base everything I do on the trust in those instincts" (Sydney, Pers. Comm.).

Advice from One Artist to Another

Mahy suggests that “any artist interested in Antarctic perception should go there” (Mahy, Pers. Comm.), and Plug concurs, “they just need to find a way to get there!” (Plug, Pers. Comm.). Chris Cree Brown, who travelled to Antarctica with the New Zealand artists’ programme in 1999, warned Shepherd it would be a life-changing experience.

Sound artist Phil Dadson advises having a strong desire and ambition to go there prior to applying, and stressed the importance of going in with “as few preconceptions as possible” (echoed by Cree Brown), and noted the usefulness of using down-time resulting from weather delays in getting “dogs-body” work done, such as logging recordings.

Shepherd advises that you need a body of work behind you. “Reading a lot helps, but still cannot prepare you completely; Scott had a great sense of audience but wrote in a scientific, not artistic, style”. He advised Farr to ensure he got photos of himself there, and advises creating before you go, so that you can compare it. He stressed that what you expect will be a creative resource when you go, may be something you do not listen to at all; for him this was the compositions of popular contemporary art composer Arvo Pärt (Shepherd, Pers. Comm.). He also commented on the positive experience of mixing with scientists: “the more you discover, the more you unearth” (Shepherd, Pers. Comm.).

Plug believes that even if an artist can’t go, “it is still valid to create artworks entirely from their imagination and reading...as people already have been doing for more than a hundred years. My best advice would be to eat, breathe, live and learn as much as they can about Antarctica and then their artwork will have a sound foundation to grow from” (Plug, Pers. Comm.).

Travel by Air and by Sea: Perspectives from the Australian Experience

An enduring difference between the experiences of artists who have travelled to Antarctica with the New Zealand and Australian arts programmes is their mode of travel. New Zealand artists have always travelled by air; their encounter with the Antarctic begins abruptly.

In contrast, the Australian artists have always travelled to the ice by sea; their introduction is much more organic. “The journey does seem to be an important part of the artist’s experience. A lot of people who have been down by both plane and boat talk about how

important the boat journey is – a real gradual introduction to Antarctica, first encountering icebergs, then penguins, then seals...” (Raw, Pers. Comm.).

In the future this distinction will be blurred. No Australian artists have gone down on the plane yet (Raw, Pers. Comm.), but an aircraft dedicated to the Australian Antarctic Programme is in the pipeline. Perhaps at some point in the future, New Zealand’s artists will also have the experience of slow travel to Antarctica.

Why Antarctic Arts? Rationale for the Ongoing Support of Antarctic Arts

There are many rationale for supporting Antarctic arts. Different funders appear to subscribe to different rationale, particularly relating to whether the output of the nation’s Antarctic arts programme should exist to support the funder’s vision. Antarctica New Zealand and the Australian Antarctic Division (AAD) share the vision of “Antarctica: Valued, Protected, Understood.” For the AAD, the vision is entrenched in their artists programme; Criteria No. 3 states: “Proposals must show that they fit the objectives of the Australian Antarctic Arts Fellowship and support the vision of Antarctica being valued, protected and understood. (mandatory)” (AAD, 2009). In detailing the objectives of the AAD Fellowship programme, particular areas of focus are elaborated which fulfil the aims of increasing “Australian and international awareness and appreciation of Antarctica”, and which “foster understanding of the Antarctic environment and communicate the significance of Australia’s activities there”.

This contrasts with Antarctica New Zealand’s position, which is that whether an artist’s output supports their vision is not a central concern. The most recent Creative New Zealand application form did not set aside an area for detailing a project’s relationship to the vision. “Antarctica New Zealand is prepared to go with all different perspectives” (Vance, Pers. Comm.). In the fellowships programme, Antarctica New Zealand also allows for artists’ fascination to be swayed by their experience: “they get fixated in ways they didn’t expect” (Vance, Pers. Comm.). For example, Dick Frizzell went down with a graffiti focus, but ended up producing artworks on the historic huts (Ryan, Pers. Comm.). While the fellowship used to be based on a project proposal, this is no longer the case, as “otherwise, it’s like sitting your bar exam before you go to law school.” Now the goal is to immerse the artists to obtain a generic experience, then take them out and leave them to it. “We are getting a more educated output now” (Vance, Pers. Comm.).

The rationale discussed below are those which, in the New Zealand context, should all be considered as reasons which validate ongoing funding of Antarctic arts programmes, which are the key driver for New Zealand's Antarctic arts output and therefore intrinsic to providing this alternative gateway for the public to assimilate Antarctica into their identity as members of an Antarctic gateway nation. They are not presented in order of importance.

The Intrinsic Value of Art

The creation of art is hugely personal. "The art produced is as diverse as the Antarctic" (Shepherd, Pers. Comm.). If they are an artist of worth, their art is of intrinsic value for what that particular artist chooses to represent, express, or explore in their work. The value of works from established artists does not depend on the art performing any other function, and its value as Antarctic art may stem principally from the fact that it was created by an artist of note, rather than the fact that they have had direct experience of Antarctica or indeed, regardless of whether or not the artist's agenda had anything to do with a uniquely Antarctic issue.

Artists can communicate whatever they wish through their art, and there is no guarantee an audience will pick up on their message. An audience takes what they want from art..."the important thing is that as many people as possible who go, express themselves – say more than what appears in facts and figures (Shepherd, Pers. Comm.). This echoes Cherry-Garrard, who urged that "Everyone who has been through such an extraordinary experience has much to say, and ought to say it if he has any faculty that way" (Cherry Garrard, 1922).

Increasing Antarctic Awareness

Writer Bill Manhire believes that artist visits "complicate our view of a place that is more than explorers' diaries and scenic photographs" (Manhire, Pers. Comm.). Arts therefore give texture and substance to the public perception of Antarctica. Artist Grahame Sydney commented that "Artists reach an audience that otherwise might not be particularly interested in, or bothered with, Antarctic awareness." He noted that the art audience is a particular, and not very big, audience. "Each [artist's] response has its own audience, and usually a relatively intelligent one and so it must matter" (Sydney, Pers. Comm.).

Artists can describe "The Ice" and communicate the romance of Antarctica, conveying "a visual record that acquaints us with the southern land and the spiritual and emotional feelings the landscape evokes" (Yarrow, 2008). It has been highlighted that "Sending

artists to the ice enables them to spread visually the message that is so difficult to express verbally” (Yarrow, 2008).

New Zealand writer Margaret Mahy had this to say: “I do think it is important to be aware of Antarctica, even if it seems remote. What makes it seem remote is that human beings don’t live there, but when I visited I was astonished at the range of life that DID live there – far more than is generally recognised. And it has a mystery²⁶ all its own...” (Mahy, Pers. Comm.). She noted that “the extremity of the Antarctic...is part of human perception of the Antarctic...[artists] are nudged into some sort of response – into trying to give some sort of imaginative definition of an extreme part of the world” and emphasised that “every artist responds with individual imagery” (Mahy, Pers. Comm.).

“Art is one of the ways in which we move towards understanding the Antarctic...[it can] extend human perception of the world in general and of course the Antarctic in particular... [As] an essential part of the world...any world view that excludes it is faulty”. In the sense that it can help to complete a world view for many people, Mahy believes that the New Zealand artists’ programme “has a strong human function” (Mahy, Pers. Comm.).

Mahy also highlighted its ability to provide the public with a vicarious access to the continent. “Art can give the human mind and imagination a perception of the Antarctic even though the perceiver has never visited the place.” She said art “expresses the Antarctic in a way that makes aspects of it absorbable in human terms – makes it part of the human imagery of the world” (Mahy, Pers. Comm.). This was echoed by Sydney, who said “In a way, it’s part of the humanising of Antarctica” (Sydney, Pers. Comm.).

Many artists stress that the arts are an important alternative to science, providing a gateway for the public to engage with Antarctica, to connect with the idea of Antarctica. Sydney notes that arts are “a slight diversion from pure focus on science. It extends beyond science into culture, which are traditional rivals” (Sydney, Pers. Comm.). Arts allow people can get a filtered experience of the Ice without having to read scientific papers. “The outside world doesn’t read science journals – they are too hard” says Shepherd, since in modern society there is a lack of science culture and a lack of time to gain the expertise (Shepherd, Pers. Comm.).

²⁶ Margaret Mahy wrote a children’s book called ‘Tingleberries, Tuckertubs and Telephones’ (1996) which includes Antarctica in the plot. Since her journey to Antarctica as an Invited Artist in the austral summer of 1998/99, she wrote the book ‘The Riddle of the Frozen Phantom’ (2001), which she describes as light-hearted and humorous, with “moments when the mysteriousness and beauty of the Antarctic is hopefully recognised” (Mahy, Pers. Comm.).

As an artist and BSc Hons. graduate in Zoology, textile artist Clare Plug, who went to the ice as an arts fellow in the austral summer of 2006/07, said “I feel I totally understand the validity of [the importance of the arts in developing Antarctic awareness]. Artists are able to communicate ideas and feelings, emotions, quite complex and multifaceted things in often quite different ways than scientists do (with their formal reports, papers, lectures etc). So...[artists are] able to reach out to a different audience, and then when you consider the wide range of media the various artists who have been Antarctic Fellows use, I think artists can increase awareness to a very wide audience, to capture their imaginations, move them emotionally even!” (Plug, Pers. Comm.).

Increasing Environmental Awareness

Antarctic arts are increasingly important in relaying a conservation message about the fragility of the continent (Yarrow, 2008), and can draw attention to particular issues, increasing awareness and stimulating debate. Some artists consider this to be a very worthy role to play. Arts can draw attention to particular aspects of human environmental impact, such as pollution, climate change, graffiti and the importance of preservation.

In her 2005 application for the Antarctic Artists Fellowship, Clare Plug wrote “I see the continent as a ‘time capsule’, an ‘ark’ and an ‘early warning station’ combined.” Her work looks at global warming and climate change (Ryan, Pers. Comm.). Plug believes “Any way one can encourage someone to take a bit more interest/notice/read a bit more about Antarctica, to learn a bit more whether it is the history, the amazing and challenging science or about how the continent affects the weather, signals climate changes, whatever, it all must be good!” (Plug, Pers. Comm.).

Fieke Neuman’s work also engages with science, while David Trubridge’s work has a sustainability and environmental awareness focus, and makes direct statements. Following his visit, Bill Manhire made the comment that in Antarctica, one’s “footprint lasts a thousand years”, while Marcus Lush, visiting as part of the Antarctica New Zealand media programme, said that perhaps no-one should go (Ryan, Pers. Comm.).

It has been emphasised that there is a risk involved in ascribing a role to art in increasing environmental or scientific awareness. “Attempts to shoe-horn the vision of any artist worth their salt into an artificial connection with scientific or environmental concerns is likely to be damaging to all three. But it is also apparent that when those concerns mesh with the artist’s own vision...the outcome is all the more powerful” (Ryan, 2008).

At a panel discussion hosted by the New Zealand Symphony Orchestra after their Antarctic Festival week in Wellington, all artists who had travelled to Antarctica noted how aware they became of environmental issues when they were down there. La Roche recalls that Grahame Sydney “felt funny about going there in terms of his impact on the environment – he needed to go there to respond but could see the impact of people being there and wouldn’t want to encourage people to go there and create a boom in tourism” (La Roche, Pers. Comm.).

Observed Impacts on Audience Awareness

As a textile artist, Plug²⁷ has noticed the impact of her involvement on the awareness of people around her: “My family, various friends, colleagues and HB Museum staff have begun to take a much greater interest in things ‘Antarctic’ and have become much more knowledgeable about climate change issues etc, not just because of what I tell them but more that they have started to read things for themselves. So now they send me articles or tell me about books or things I mightn’t know of, they say I have spread the “A” disease to them too! Just a bit of an interest and enthusiasm seems easily passed on!” (Plug, Pers. Comm.).

Grahame Sydney found a “great richness of subtlety” and this is what he has focused on with his photos and couple of paintings. “Sometimes people might say they ‘didn’t realise the subtleties could be so beautiful, where there seems to be nothing.’...each artist responds differently, so it adds up to a colourful tapestry of responses in the end, and everyone will hopefully be getting the sort of response their art is focusing on, that people will respond to [their art’s focus]” (Sydney, Pers. Comm.).

An Engagement Legacy: The Artist as Gateway

Some artists continue to produce Antarctic works well after their proposed output has been fulfilled, and continue to make their works available to the public. Depending on the medium, this may be through temporary or permanent installations, exhibitions, performance or publication. Textile artist Clare Plug says “I have lots of ideas of other works beyond the ones I am making at the moment, themes I want to explore in more depth with future exhibitions. I plan to continue working with Antarctic themes for some time yet!” (Plug, Pers. Comm.).

²⁷Clare Plug’s solo exhibition “Look South” will open at the HB Museum and Art Gallery in May 2009 and she hopes it will tour various New Zealand venues for 2010/11 (Pers. Comm.).

Many artists continue to engage with the public regarding their experience, some giving lectures or public talks; others are active in visiting and giving talks at schools or retirement homes (Ryan, Pers. Comm.). In this case, an artist has truly taken on a Antarctic Gateway Identity, lending a personal impact to their audience's experience of their art. This can even create a truly two-way, interactive exchange. Patrick Shepherd gives lectures, talks and visits, and finds people have a thirst for it. He attributes this to the mystery and mythical qualities of Antarctica. He believes artists do have a role as a gateway themselves in that they give people an opportunity to connect, with the artist as interpreter (Shepherd, Pers. Comm.). Photographer Anne Noble and writer Bill Manhire are tertiary educators. Noble has continued her engagement through two further visits since her fellowship; one on a cruise ship and one with the NSF artists' program (Ryan, Pers. Comm.). Manhire has continued to write, lecture, discuss and reach a wide audience (Vance, Pers. Comm.).

Naturally, personality is a factor in the extent to which this occurs; not everyone takes pleasure in speaking to a public audience, and not every artist necessarily enjoys their Antarctic experience. Ryan says that post-visit engagement is not part of their brief, though it is of course hoped for. "It depends on the nature of people – it varies tremendously as to how they respond to school and superannuitant requests for talks" (Ryan, Pers. Comm.).

Artist Development

For Creative New Zealand, the fellowship programme has value as a development opportunity. "Creative New Zealand sees the artist residencies as complementary to the invited artists programme...the emphasis is deliberately on emerging and mid-career artists" (La Roche, Pers. Comm.).

Social Benefits: An On-base Morale Booster

For those in Antarctica as staff, the process of creating art is a means of processing, and giving expression to their experiences. The social benefits of artist visits has also been noted: "Base staff appreciate the artists being there – its a very good morale booster... it relieves institutionalisation" (Vance, Pers. Comm.). Field Training staff, who have the responsibility of training all new visitors to Scott Base in basic survival skills in the Antarctic environment, particularly enjoy them (Vance, Pers. Comm.).

The ability of the artist to boost the morale of on-base staff depends on the artist's personal disposition and their level of contact with base staff. Avant-garde artist Ronnie

van Hout was very popular with the staff at Scott Base “because he was so ‘out there’” (Vance, Pers. Comm.). The Australian Antarctic Division is currently about to send down their first overwintering artist, Stephen Eastaugh (Raw, Pers. Comm.). He has been down to the ice several times before, and the outcome of this trip will shed further insight on this particular role of artists in Antarctica.

Building a Public Art Asset: National Antarctic Programme Collections

Each visual artist who goes down contributes one or two works to the Antarctica New Zealand art collection. For the funders such as this national Antarctic programme, the arts are therefore of value in building an art collection that is of considerable worth.

The tangible value of the collection is primarily a result of contributions from the Invited Artists programme. However, the intangible value lies in its accessibility to the public. In light of the fact that most people will never have the opportunity to travel to Antarctica, sharing this artistic output with the public allows it to perform its gateway function, wherein it can give a vicarious Antarctic experience and insight into Antarctic’s uniqueness. This is when the existence of the collection becomes in line with the organisation’s vision of Antarctica: Valued, Protected, Understood.

Antarctica New Zealand’s art collection is housed on their campus at Christchurch’s International Antarctic Centre, and is open to the public. The works are available for free loan to any New Zealand gallery wishing to hold a public art exhibition.

Profile and PR Benefits

The ‘who’s who’ of artists on Antarctica New Zealand’s invited artist roll-call has the benefit of raising the agency’s profile.

As government agencies, supporting artist programmes may also be a means to give the tax-paying public a greater sense of worth for their dollar, as many people do not understand science, and some feel disgruntled about its exclusive domain over the Antarctic spend. Sydney feels that “In those terms, Antarctica New Zealand deliberately makes a lot of use of those arts...it is part of their effort to broaden the audience and make the taxpayers’ investment in Antarctica appear more broad and of wider appeal than simply the science, which some people may resent” (Sydney, Pers. Comm.).

Manhire also suggests that “in more pragmatic terms, I suspect that artists visits are one of the ways in which science defends its own more or less exclusive access to that space” (Manhire, Pers. Comm.).

Any Publicity is Good Publicity: Stimulating Discussion

When reporter and television personality Marcus Lush travelled to Antarctica as part of the media programme, he was initially briefed to focus on the ANDRILL project, however he “didn’t engage with the science stuff at all” (Vance, Pers. Comm.). Lush’s attention was instead drawn to so many other things, that the end result was a fascinating five-part television documentary series on the history of humans in Antarctica called ‘Ice’ (2007). He concluded the final part with a discussion on how his preconceptions had changed, how he’d changed from a penguin-ignorant to a penguin-lover, he’d be back in a heartbeat, yet he felt guilty-glad: “Glad I went, guilty you can’t”. He talked about how he worries about the future of Antarctica and the impact he made, recommended that tourists not go there, and then finishes with a remark that Scott Base is rather like a hostel he can’t see the point of. This may seem like a rather ungracious way to portray his host, but Antarctica New Zealand’s position resonates with the adage ‘any publicity is good publicity’. “The series he did do on Antarctica pulled really good ratings; at that time only Coro [Coronation Street] outrated Lush’s Antarctic series” (Vance, Pers. Comm.).

In the past, some artists have created controversy through works which seem to depict absolutely nothing, consisting only of a blank canvas, or several minutes’ worth of total silence. They certainly achieved the rationale of stimulating discussion!

Reinforcing National Identities

Art can of course represent pre-existing aspects of national identity. In the Dry Valleys, Nigel Brown painted a work in which Scott and Hillary meet to discuss the nature of ambition, a delightful vision of what could be possible in a world without linear time. Bill Manhire wrote a poem, called Erebus Voices, for Sir Edmund Hillary to read at a service at Scott Base which commemorated 25 years since the Mount Erebus disaster. This respectfully and powerfully created images of the post-disaster relationship between the spirits of those who died and the mountain. Such works are an incredible complement to the way in which we tend to approach things which become part of our identity. It seems that once they do, they are no longer questioned or re-presented, but in these cases, our perception of history is texturised, given greater substance as comprising more than stirring tales of manlihood and statistics as a yardstick for tragedy.

Professional artists seek to create works which avoid cliches, however preexisting aspects of the national identity are also a logical frame of reference for amateur artists. During a recent student field trip, several ice sculptures were created which took their cue from pre-existing icons, such as the koru, a Maori symbol of growth and development, penguins, the ubiquitous Antarctic icon, and an interpretation of Antarctic Christmas²⁸ (Fig. 12).



Fig. 12. In a nod to Hillary, Achilles delivers the Christmas wishes on behalf of Santa.
Image: L. Tomlin.

The value of such amateur artworks lies in the accessibility of their subject to the general public. Though they do not challenge, like the hooks of pop music their easily recognised frames of reference provide a mental 'hook' for the recall of new information learned when delving into the artist's approach, technique used, and reason for the work, and can stimulate discussion on scientific and experiential elements alien for many Kiwis. In the case of the Antarctic Christmas ice sculpture, this included the historic event that inspired it, the gnome as a symbol of Guarding Naturally Over Mother Earth, a discussion of good and bad taste, digging an ice pit to study different types of snow and the way they affect radar pictures needed to look at how Antarctica is responding to climate change, and the challenge of carving névé (young, granular snow) and firn (partially compacted névé).

²⁸ The latter featured a garden gnome autographed by Kiwi icons such as Antarcticans Sir Edmund Hillary, David "the Duke" Harrowfield, the previous Prime Minister Helen Clark, former Christchurch Mayor Garry Moore and current Christchurch Mayor, Bob Parker, positioned in a tractor towing the Christmas sleigh, as a nod to the Trans-Antarctic Expedition of 1959 in which Hillary was the first to drive to the geographic South Pole on a tractor (Fig. 11).

Shaping National Identity

As social frames of reference in modern life are constantly in a state of flux, so too is what constitutes the national identity. There is great value in questioning assumptions about our identity; discovering and breaking these down leads to new worlds of thought. Art can play an important role in challenging our identity assumptions, forcing us to consider what lies beneath them.

The colonial context of much of Antarctic history, the tendency to represent past explorers as heroic, and the identification of the “Heroic Age” as something relegated to history are assumptions inherent in much Antarctic arts. For many Emerging nations, their Antarctic ‘Heroic Age’ is only just beginning, and is being domestically exploited as “a source of national pride”, since “tales of nationals doing amazing things provides goodwill for the state and distractions from issues at home, while reinforcing national identity and political legitimacy” (Brady *et al.*, 2009).

Antarctica is the most intellectual landscape on earth (Pyne, 1986), so the developing arts are a way to redress the way in which science has dominated the continent so far. For Antarctica New Zealand, the artist programmes are not about decoration. “It’s storytelling...culture change...that’s the kind of people we pick. We invent culture as we go along” (Vance, Pers. Comm.). Antarctica New Zealand is relatively liberal; “there’s a toleration of avant garde art more...we do send avant-garde artists to the ice, for example Ronnie van Hout” (Vance, Pers. Comm.).

On How Arts Programmes Could Develop in the Future: Maximising Positive Outcomes

If the stakeholders in the artist programmes are considered to be artists, funders and the audience, then there are ways in which the outcomes discussed earlier can be maximised.

Artist Expectations

An environment unfettered by expectations is the one which best serves the intrinsic value of art and an artist’s ability to express something unique to them. Antarctica New Zealand is strong in this sense; they do allow for the fact that an artist may want to change their project once they have experienced what it is like to be down there, understand the experience can take a long time to assimilate before it can be utilised or creatively ‘tapped into’, and feel greater value in preserving a good relationship with the artists than in

hounding an artist for their output when it is taking time (Vance, Pers. Comm.; Ryan, Pers. Comm.). This situation should be maintained for the future.

Residency Duration

Artists who have been to Antarctica through the New Zealand programme frequently cite the need for longer time down there. "...they can't create the world out of nothing in six or seven days" (Manhire, 2005). Mahy believes she was "incredibly lucky to be given the chance I was given", and the only way her experience could have been enriched is if she "had been able to stay down there for a whole year. There must be a big difference between an Antarctic midwinter and the time I was there (an Antarctic midsummer)" (Mahy, Pers. Comm.).

Similarly, Plug said "It was a tremendous privilege to be able to go to the Ice, a lifetime highlight for me. But if I could dream and be greedy about this I would love to have a longer time there, or to be able to go again. Whilst I really tried hard to be well prepared before my trip there I felt by the end of the two weeks I was just beginning to feel at ease, beginning to feel orientated and up to speed with all that was going on and how the Base operated" (Plug, Pers. Comm.). The Australian programme involves artists going down by boat, so their impressions can grow much more organically over the days they draw closer to the Ice, while the US artists program provides a longer time on the ice (6 weeks). The Australian programme is just about to send down its first overwintering artist, repeat-visitor Steven Eastaugh, for the austral winter of 2009.

Revisiting Antarctica

Artist development is best served by ongoing opportunities, and artist Clare Plug suggests a possible future development of the arts programme would be "to look at taking some of the artists who continue to draw their inspiration from the experience back again for a second visit" (Plug, Pers. Comm.). The value of this to the artist is underscored by the fact that several artists have undertaken repeat visits independently, such as Margaret Elliot, who has been down again as a tutor with Gateway Antarctica's Graduate Certificate in Antarctic Studies, and Anne Noble, who has since experienced a cruise to the Antarctic and participated in the NSF Artists and Writers Program.

Who Goes There?

There is an ongoing Invitation-only vs. Application System Debate: Both Creative New Zealand and Antarctica New Zealand acknowledge that the Arts Fellowship application process does influence which artists will apply for the programme (La Roche, Pers. Comm.; Vance, Pers. Comm.). The top echelon of artists wouldn't need to apply for fellowships, and wouldn't want to jump through all the hoops (Vance, Pers. Comm.). Sydney notes that while the fellowship application system is "democratic and open to all", he would never apply to it. "I don't like any system being based on competition and being 'judged', so while there was only an application system, I would never apply. ...maybe artists don't like the competition aspect [or] don't know about the programme" (Sydney, Pers. Comm.).

The question as to what 'level' of art should be afforded the indulgence of expensive patronage in such a unique environment is a topic of debate. Sydney, who catalysed the Invited Artists Programme and was the first artist to go south on it, notes that in the application system, the enviable opportunity to go down to the ice was being given to those who applied each year, not necessarily the best in their field. "My rather harsh view is that [Antarctica New Zealand and Creative New Zealand] are in danger of squandering a remarkable opportunity on those who aren't the best in their area...the invited programme gives better return for the investment and produces better quality work...I would prefer the whole thing to be based on invitation, though that's a fairly elitist view and not fully supported...this is not a view shared by everyone, but I feel it very strongly. Its got to be treated as a rare, special thing in the way the application system doesn't do it" (Sydney, Pers. Comm.). This of course raises the spectre of bias in terms of who makes the list, but Sydney is adamant that if an informed panel were to each make a list, "there would be a number of names that would occur in every list, and it wouldn't be difficult to find twenty major stand-out people in each of the creative departments" (Sydney, Pers. Comm.). Matt Vance said when the panel of experts in their field create a shortlist for Antarctica New Zealand's Invited Artists Programme, there is never any lack of people on the list (Vance, Pers. Comm.).

The two programmes, if they are to continue to run side by side, need to maintain clarity of purpose so that maximum benefits are obtained. If a spin-off involving Antarctica New Zealand's vision statement of Antarctica "Valued, Protected, Understood" is sought, then this expectation needs to be made very clear in the application process.

Future Environmental and Scientific Awareness Arts

It seems that the artists who have produced works which relate to the environment are those who already had an enduring interest or background in science or the environment; fair enough, since such fields may initially seem dry and data-saturated; the inaccessibility of science to the public was discussed earlier. However, has an Antarctic experience broken down these barriers? Since the vast majority of artists who have been down now consider themselves much more aware of environmental issues, it stands to reason that some may now feel in a much more informed position to create works of environmental commentary should they have the opportunity to make a repeat visit. Perhaps environmental commentary should be an additional programme specifically offered as a repeat visit opportunity. This would allow for (i) no artificial connections resulting from artists being 'shoe-horned' in order to gain an initial Antarctic experience, (ii) a proposal-based system, which would also encourage an artist to benchmark for themselves whatever level of awareness they feel is appropriate to their proposal, and (iii) artists would be able to orient themselves and find a productive space much more readily, since as a repeat visitor they would be already familiar with the landscape, culture, and unique artistic challenges presented by the Antarctic environment.

Gateways to New Zealand's Public Antarctic Art Asset

Public access to New Zealand's Antarctic art is an issue. Antarctica New Zealand's art collection is available for loan free of charge, to New Zealand galleries wishing to hold a public exhibition (Ryan, Pers. Comm.). Nevertheless, with respect to the artists programme, some feel that the art has "sunk without a trace" and "needs unearthing" (Shepherd, Pers. Comm.). Although Antarctica New Zealand's on-site fine arts collection is open to the public free of charge, this only benefits those who are able to get there, excluding many New Zealanders. Perhaps the collection would be more appropriately housed in a more centralised gallery dedicated to Antarctic art – such a suitable venue would be ideally located in the city's cultural precinct, and could possibly find a home in the Robert McDougall art gallery, a tremendous venue which backs onto the Canterbury Museum, home of a permanent collection of Antarctic artefacts. A heritage building, the Robert McDougall Art Gallery was the previous site of the Christchurch art gallery and is terribly under-used, being stymied by disagreements over its possible redevelopment and ultimate use. An interface between the collections of Antarctic art and Antarctica artefacts would provide for a centre which celebrates New Zealand's emerging Antarctica identity, and as a cultural heart, would represent a significant step in the direction of making Antarctica "Valued, Protected, Understood".

A dedicated gallery could feature performance works, multimedia works, jewellery, furniture, music, film, books, a reading room, and exhibitions hosting Antarctic arts created

in other countries, not necessarily just through other national Antarctic arts programmes. It could be a way to strengthen links between Christchurch and other gateway cities. An Antarctic cultural centre could be a key way in which the principles of the Antarctic Treaty and the Madrid Protocol are celebrated, such as international peace, cooperation, environmental protection, the intrinsic values of Antarctica including wilderness, heritage and aesthetic values, and the recognition that art has a role to play, acknowledged in the 1996 ATCM. Such a gallery could ultimately be a permanent cultural bridge mending the traditional abyss between science and the arts. It would require government funding from departments to which its achievements are most relevant (Ministries for Culture and Heritage; the Environment; Ministries of Defence; Economic Development; Education; Foreign Affairs and Trade; Research, Science and Technology; Social Development).

Since there is also an invisible, but culturally significant, body of amateur Antarctic art which would give insight into Antarcticans' personal stories as expedition and base staff members, there would be great value in this becoming available in some way. Shepherd acknowledged that amateur art could have worth, but it has to be put "out there" – so the artist must feel a need to share their work, rather than keeping it to themselves, and some may not want to; it may be an intensely private thing (Shepherd, Pers. Comm.).

There is a need for a book on New Zealand's Antarctic arts legacy. Antarctica New Zealand did undertake to start such a record, though it was never completed (Ryan, Pers. Comm.). In a review of Lynne Andrew's recently released book "Antarctic Eye: The Visual Journey" (2007), Ryan noted that it is apparent "there is now a substantial and diverse body of Antarctic art produced by New Zealand artists that is deserving of similarly sympathetic and knowledgeable exploration" (Ryan, 2008).

Though it can be easily understood that it is not the role of Antarctica New Zealand to organise exhibitions (Ryan, Pers. Comm.), these days art does not necessarily need to be exhibited to be made publicly available. Nationwide and international access to New Zealand's Antarctic arts legacy would be tremendously advantaged by the creation of an online portal in which a complete digital archive of works, reviews, commentary and history could be accessed. Such a resource would be an excellent educational tool, easily accessed by educators and students alike. It would be relatively easy to integrate this into the requirements of the fellowships.

Communicating Gateway Identity through Technology

Why Technology?

The awareness, engagement, and understanding of school children, the general public, and decision makers world wide is required for the enduring protection of Antarctica. Technology, of all the forms of communication, involves the smallest environmental footprint. Where exhibitions can be either transported around the world at great cost, or made available in an online portal, the latter obviously has the least environmental impact, and may fulfil all the needs of a particular audience. The environmental footprint of much internet technology also contrasts favourably with that of festivals, which require people to travel to a particular place for an event.

Internet technology as a portal involves choice, it costs nothing, and has the true spirit of exploration in it because it is self-guided..."You look for it yourself...technology is where 21st century man does his exploring" (Shepherd, Pers. Comm.). Another source of power in technology as a medium is that it may be used to deliver messages and experiences to greater audiences than just one.

Websites featuring Antarctic content have long proliferated, and Antarctic scientists have for some time now been using blogging as an alternative, more accessible way to communicate their experience of living and working on the ice. However, many online tools now allow for a truly interactive learning experience relating to the Antarctic. Information can be uploaded, downloaded, presented, and exchanged in real time.

This section considers two examples of interactive learning, as applied with an Antarctic context.

Case Study 1: Gateway to Base!

Gateway to Base! was featured in the 2008 Christchurch Antarctic Festival, and featured a live link to Scott Base from Christchurch using videoconferencing technology via a satellite link-up. The technology was sponsored by Telecom New Zealand, telecommunications provider to Antarctica New Zealand and Scott Base.

A white, inflatable projection screen was utilised, which symbolised a snowball and also had a futuristic appearance. The screen featured a rear-projection unit and was anchored to the pedestrian area. Siting was carefully chosen for maximum pedestrian visibility and therefore public access, location within the inner city 'Cultural Precinct' which featured a plethora of festival events, and in a site which would afford the Scott Base staff members nearing the end of their winter-over, a scenic connection to the city. The final site chosen – outside the 'Our City O-Tautahi' venue - fulfilled all these criteria, allowed power and ISDN line access, and had the additional bonus of being adjacent to the statue of Captain Robert Scott.

The event was initially conceived to be interactive, in which Christchurch tertiary students would have the opportunity to ask Scott Base staff questions about life on the ice, but at which musicians would also perform, and allowing Scott Base staff to nominate spot prizes. The concept was that Christchurch would also 'give back', for two reasons, the first being that people tend to value something more when it isn't given for free, i.e. If they had to do something in order to access it – by placing a responsibility on the audience to interact and contribute in some way, rather than passively uptake information, would serve to make the experience sweeter, more cherished. Secondly, the staff had spent such a long time relatively isolated from the community, and were generously giving of their time in order to answer questions; it seemed only fair that they come away from the experience with a positive impact on their morale.

The response from the tertiary sector was slow, however, and the focus therefore shifted to a younger audience, with a much more eager response. The children of Cobham Intermediate had had the benefit of studying several "Big Bergs" (well-known New Zealand Antarcticans) as part of their curriculum, and had created an exhibition at Our City Otautahi. They enthusiastically took up the invite to now connect directly with people on the ice, and approached the microphone and camera in groups to introduce themselves and talk to base staff about their "Big Berg" and what they had learned. They

were then able to ask their pre-prepared questions, which showed the insight they had gained through the opportunity they had had for in-depth study.

The St. Martins Primary School choir also responded positively to the challenge, and performed four songs including “Seasons of Love”, “Ain’t No Mountain High Enough” and “It Don’t Mean A Thing”. The response of base staff was to stand to attention for the entire duration of the performance. The children were then able to take turns approaching the staff with their questions and a great time was had by all. The response of the children following the event was that they learnt “heaps” and it was “really cool”.

The public videolink extended for two hours’ duration and drew an audience of mixed age, featuring residents, tourists, and family members of base staff (Fig. 13). Overall it showed great potential to grow to a regular, daily feature of the Antarctic Festival Programme, but this would require extensive sponsorship owing to the expense of the videolink.

Feedback from the *Our City O-Tautahi* exhibition coordinators was that “Our ‘little bergs’ were over the moon - a lot of their parents also came to see them - so in this manner you have actively contributed to what we like to do here - build bridges and relationships with community” (Clayton, Pers. Comm.). The event also “greatly impressed Antarctic Pioneer Norman Hardie – he was quite blown away by the entire concept”, simultaneously raising the profile of *Our City O-Tautahi* as an Antarctic Festival hub (Clayton, Pers. Comm.).



NEWS 27 September 2008, 10:37AM



The Live Link sessions at Our City O-Tautahi CREDIT: Christchurch City Council



The Live Link sessions at Our City O-Tautahi CREDIT: Christchurch City Council



The Live Link sessions at Our City O-Tautahi CREDIT: Christchurch City Council



The Live Link sessions at Our City O-Tautahi CREDIT: Christchurch City Council



The Live Link sessions at Our City O-Tautahi CREDIT: Christchurch City Council



The Live Link sessions at Our City O-Tautahi CREDIT: Christchurch City Council

Students sing for Scott Base staff

By Christchurch City Council
692 views

CHRISTCHURCH

A touch of magic: The junior choir from St Martins School sang "It Don't Mean a Thing (If it Ain't Got That Swing)", "Seasons of Love" and "Ain't No Mountain (High Enough)" as staff from Scott Base, Antarctica, crowded around their video feed listening to sounds from home.

The Antarctic Festival 2008 started with a two-hour video conferencing outside Our City O-Tautahi using the Brand Bubble television and an ISDN connection to the continent provided by Telecom.

Cobham School children - who created the Antarctic Festival's "Big Bergs" exhibition at the same venue - informed Base staff what they had done for the exhibition and asked numerous questions.

Fig. 13. Report on Gateway to Base! Source: Kiwi Online.

Other applications of videolink technology

Videolink technology was also used to great effect by the Wellington Symphony Orchestra, which broadcast a live performance of Vaughan Williams' Sinfonia Antarctica direct from Wellington to Scott Base.

Case Study 2: Virtual Fieldtrips

Another example in which interactive technology has been used to great effect is that of a Christchurch company (www.learnz.org.nz). The LEARNZ programme (Linking Education and Antarctic Research in New Zealand) began in 1995 as part of Antarctica New Zealand's education and outreach programme; the Antarctic component is named "Science on Ice". Utilising great stories from New Zealand Antarctic science, the virtual field trip concept was developed, which allowed students to go on "learning adventures to the Dry Valleys, the Antarctic coast and the Ross Sea in the depths of an Antarctic winter on-board a research ice breaker"...all from the classroom. A teacher with the company works alongside researchers to interpret and communicate their work to levels suitable for absorption by school children, depending on their level, and to meet science, social studies and technology learning objectives within the curriculum.

Four New Zealand educators have been able to reach thousands of primary and secondary school students world wide, who have learned about Antarctic landforms, floating ice, penguin reproductive biology, the ozone layer, marine food chains, the decay and preservation of historical artefacts, and the importance of appropriate clothing for Antarctic field conditions. The process involves teachers utilising a resource book to guide them through the associated classroom experiments, online interactive learning, blogs by the researchers, live audio conferences, video, photo galleries for field perspective and subject detail, and emails. The experience is personalised for the children by inclusion of their nominated class mascot in the actual field trip; the mascot even keeps a diary and answers questions. Student learning is further encouraged by the integration of quizzes and a competition. Pre-prepared questions are organised so that each school gets the benefit of questions asked by other schools.

LEARNZ report that their programmes "see teachers gaining confidence and becoming inventive and creative in integrating technologies into their teaching programmes". Teacher feedback included:

"It is a fun and interactive way for children to learn. They can continue their learning at home, sharing the website, diaries etc with their parents. The children become more independent in their learning" Linda Jensen, Kaihere School.

"Its the most realistic virtual opportunity my students can have without leaving the classroom" Bev Kemp, Karoro School.

“It was magic watching them...I certainly think the grandparents learned a thing or two”
Tirina Goldsmith, Thorrington School.

Programmes such as this have great power to “reach the unconverted...early experiences are very important...one of the most powerful audiences are young kids who will become future taxpayers” (Vance, Pers. Comm.). These audiences are also reached through the technology of the film. Matt Vance, Communications Officer with Antarctica New Zealand, believes that there is a lag time of about 20 years, but films such as “Happy Feet” will result in a positive “blip” in penguin science, as Jurassic Park created a blip in dinosaur research. “This shows the power of one message to go through a generation” (Vance, Pers. Comm.).

The Science on Ice programme receives support from Antarctica New Zealand and the Ministry of Education, and shows great innovation in making an Antarctic experience available to children of a wide range of ages, and allowing them to share their experience with family members outside the classroom.

Technology in IPY Outreach: the New Zealand Connection

Technology is widely used by the IPY group APECS (Association of Early Career Scientists), an international collaboration to provide mentoring and opportunities for early career scientists, as well as polar education and outreach. It is today a strong and vibrant group of nearly 1800 members worldwide. One of the initiatives the New Zealand APECS group coordinated for IPY was a challenge in 2006 for secondary school children to create polar learning resources for use by their own age group. The entries were encouraged by first prize of a trip to Antarctica with Canadian tour operator “Students On Ice”, including travel between New Zealand and Ushuaia, and a second prize of a year’s fees paid for study at Gateway Antarctica, at the University of Canterbury. Antarctica New Zealand and the University of Otago also provided support.

The winning entries were extremely innovative (Haase, Pers. Comm.); the first prize winner created a game in which students had to locate potential sites for Antarctic bases and give reasons why they thought the site was justified. The game then came back with an explanation as to why it was good or bad on the basis of factors such as required clothing, transport, logistics, site geology and the risks involved. The second prize winner had created a DVD with powerpoint comparing the Arctic to the Antarctic, including a song and a game.

Initiatives such as this, with serious enticements for students to get involved, have the potential for secondary students to create their own Antarctic study resources, for implementation into the national education system. They deserve ongoing support as a key component of secondary level youth outreach, which IPY supports as part of the stimulation, nurturing and development of the next generation of researchers (IPY, 2009).

For international organisations such as APECS, “Technology is important through its necessity in shaping strategies, as well as reaching the public, TV and other media...Youtube has recently been utilised a lot for documentaries” (Haase, Pers. Comm.). They are often promoted widely and include innovative content; a recent example from the United States was the performance of a children’s rap song on climate change.

Future Roles for Technology

The National Science Foundation recently contributed to the newest version of Google Earth, which “enables users to dive beneath the surface of the sea and explore the world’s oceans” (NSF, 2009). The new version illustrate glacial, geological and oceanic processes which influence the behaviour of the West Antarctic Ice Sheet, through text, diagrams, photos and videos.

It would be an exciting proposition indeed, if future versions of Google Earth would enable people to take a virtual exploration of the areas around national Antarctic bases, with real-time information on weather conditions and regular postings from researchers and staff based there. This is another way in which the Antarctic can be humanised and made more accessible, without necessitating people travel there.

As technology moves so fast, one is provoked to consider how far technology with outreach capacity, such as television, will go. Reality TV in Antarctica may end up being considered in the future, outlandish though this may seem. The key risks are obviously that important Antarctic issues could be trivialised, that it could serve to simply increase the number of people wanting to go to Antarctica, rather than build a protective lobby concerned with stewardship, that the production would interfere with the work and morale of Scott Base staff, and that the environmental impact of the production would be too large to justify its manifestation. Perhaps it would be possible for a proposed production to address all these issues.

The production could focus on raising awareness of scientific or environmental activities in Antarctica, while also gaining publicity for National Antarctic Programme activities on the continent. A heavy responsibility would be borne by the producers in the framing of Antarctica to avoid adverse demand for visitation leading to greater environmental impact. For minimal adverse impact on base culture, the production would most probably need to be isolated such as at a field camp, and in order to have any integrity at all, its participants would need to be justified in being in Antarctica under the normal operational parameters of the scientific, education, arts, media or youth programmes, and fully supportive of involvement in the production. With respect to the latter objection, a preliminary environmental impact assessment would have to be undertaken. Under the Madrid Protocol, human activity in Antarctica should must be assessed prior to the activity, and may proceed directly only if considered to cause 'less than a minor or transitory impact'. If the proposed activity is considered to have 'equal to' or 'greater than' a minor or transitory impact, the process is much more involved²⁹.

The production would need to be interesting, and due to the popularity of reality TV shows it appears that human conflict is the most interesting thing for many people to watch. It is certainly true that field camp situations provide unique contexts for conflict. The proposals for international bases, which would involve management of culture clashes, would also provide potential sources of conflict. The redeeming possibility of placing potential sources of conflict under the microscope on a natural reserve dedicated to peace and science is that through conflict, humanity can paradoxically be increased, as in darkness, one comes to know oneself better, and there is no greater opportunity to come to understand a person different to yourself, than when you are with them 24/7.

Can such “blue collar entertainment” (Vance, Pers. Comm.) and its associated environmental footprint ever really be justified? Is there actually any precedent for Reality TV having resulted in significant gains in environmental or scientific awareness? Overall, the question of “how ‘far out ‘should outreach reach?” is a question of appropriateness and ethics for the ATCM to debate, hopefully prior to any such events occurring. Perhaps the status quo of video blogging by official scientists, base support staff, media and

²⁹ If the proposed activity is considered to have 'equal to' a minor or transitory impact, an Initial Environmental Evaluation (IEE) must be carried out, all treaty parties advised via the annual IEE list, and the activity must be monitored. If deemed to have 'greater than' a minor or transitory impact, then a Comprehensive Environmental Evaluation (CEE) for the activity must be carried out, circulated to all treaty parties, and discussed at the ATCM, with provision for resubmission of CEEs taking into account feedback from other treaty parties (Madrid Protocol, Annex I, Articles I-6).

educators is the only appropriate form of 'Reality TV' for Antarctica, in which the frames are created by those who are actually living and working there.

This would parallel at the level of the individual, the position of the Antarctic Treaty nations that that Antarctica's status as a natural reserve, dedicated to peace and science, and protection of its intrinsic, wilderness and heritage values, is best served by those nations who are actually active on the continent, rather than the United Nations in general.

Treaty principles should be the guiding factor in the development of all strategic gateways to Antarctica, whether they are founded in the arts, technology, the festival, or another kind of gateway.

Communicating Gateway Identity through the Festival

“...culture has one great passion – the passion for sweetness and light”
Matthew Arnold (1873).

It is a key part of human life to want to celebrate good things, to uplift the spirit and to honour the things we value. Festivals are one way in which we complicate and share the celebrations, by creating different public events linked by a common theme. In the Antarctic Festival, many different aspects of past and present Kiwi connections to ‘the last great wilderness on earth’ are celebrated, with special care taken to create events which will be appropriate and relevant to different interest groups to learn more about the Antarctic and their connections to it.

The premise is that these Antarctic connections are worthy of celebration, and can be relevant to everyone, whether they have been to Antarctica themselves, know someone who has been, or simply live in a place which has a unique, multifaceted Antarctic history associated with fascinating stories, enduring climate connections, vibrant contemporary connections and a growing Antarctic culture of which the festival is a part. Through its accessibility, the festival functions as a gateway for the public to engage with various aspects of Antarctica and share in the national Antarctic identity.

The Christchurch Antarctic Festival: Contexts of Establishment and Development

The origins of the Christchurch Antarctic Festival lie in the cocktail event traditionally held to celebrate the opening of the austral summer’s Antarctic season. The event celebrated Antarctic relationships and international links, but as an invitation only event, it did not seek to engage the public. This event has since become a Civic Function, and continues today.

The inspiration to grow the season opening celebration came from a trip to Hobart to visit Tasmania’s *Midwinter Festival*³⁰ in 2005, by Christchurch’s then-Mayor, Garry Moore, along with Lou Sanson, CEO Antarctica New Zealand, and Larry Podmore, Science and Technology Manager at the Canterbury Development Corporation (CDC), and at which

³⁰ The Tasmanian Midwinter Festival was established in 2000.

they were impressed by the way the Tasmanian festival proactively enhanced the city's Antarctic Gateway status.

As part of a \$1.887 million Events funding package approved by the Christchurch City Council on 4 August 2005, provision was made for a Christchurch Antarctic Festival with a \$60,000 funding commitment (CCC, 2005a). The prequel was commenced with the opening of the Antarctic season in October of that year, featuring a simple cluster of events which celebrated Christchurch's unique connections to Antarctica – in particular the city's relationship with the US Antarctic Program – and plans for growth into a festival proper the following year.

The 2005 events featured a wreath-laying ceremony at the Robert Falcon Scott memorial statue, an Official Season Opening, and the launch of a \$10,000 one-year post-graduate scholarship at the University of Canterbury's Gateway Antarctica, including support from Antarctica New Zealand to carry out research in Antarctica (CCC, 2005b). These were complemented by events driven by the local Antarctic community, such as guided tours, displays and talks hosted by the Antarctic Heritage Trust, Canterbury Museum, Lyttelton Museum, Christchurch Cathedral, and well-known Antarctic explorer Baden Norris, at Warner's Heritage Hotel.

During 2005, the prestigious Condé Nast Traveller Awards in Britain announced New Zealand as the best country in the world, for its natural beauty, clean, green image, and reputation as a safe, peaceful haven. This showed a good resonance between the visitor perception that New Zealand's key attributes are associated with wilderness, purity and peace, and attributes of Antarctica which the ATS seeks to preserve.

The inaugural Antarctic Festival in September 2006 was coordinated by Antarctic Link Canterbury³¹ (ALC), a regional Antarctic business cluster. The festival's appeal was broadened with the addition of lectures and other educational events, films, and a family day in Cathedral Square called *Antarctic Fantasy* which introduced Huskies and the team-based *Hägglund Challenge* (Fig. 14), while continuing traditional events such as the wreath-laying memorial ceremony at Scott's statue.

³¹ Antarctic Link Canterbury was established in 2001. Founder members are: Christchurch City Council, Antarctica New Zealand, Gateway Antarctica, International Antarctic Centre, Christchurch & Canterbury Marketing, Canterbury Museum, and the Antarctic Heritage Trust.

Fig. 14. The Hågglund Challenge, Cathedral Square, Christchurch Antarctic Festival 2006. Image: Neil Macbeth.



The 2006/07 season also marked the 50th anniversaries of Scott Base, IGY, and New Zealand's sustained partnership with the USAP, a 'milestone' of 'friendship'³², highlighted by the NSF at the season opening event (NZUSE, 2006).

These themes were celebrated in the 2007 festival (Fig. 15.), which built up its public education content with a week of activities including films, discussions of polar psychology, adventure, heroic exploration, dogs in Antarctica, the history of women's involvement in Antarctica, art and photography including the new *Cold Snaps* competition. The free family fun day sought a new venue and transferred to Wigram Airport, featuring entry onto planes such as the New Zealand Airforce Orion and into the Airforce Museum's *50 Below* exhibition³³. The festival concluded with the New Zealand Antarctic Society hosting *50 Years on the Ice: 1957–2007*, an international-invitational weekend of activities featuring a dinner with famed international explorer and conservationist, Will Steger.

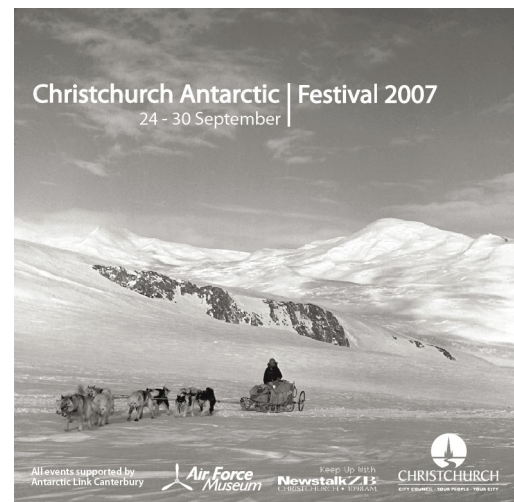


Fig. 15. Christchurch Antarctic Festival 2007 programme. Image: CCC.

³² This was highlighted in a message from Dr. Karl Erb, Director of the National Science Foundation's (NSF) Office of Polar Programs, delivered by Art Brown (NSF Representative in New Zealand) at the season opening event (NZUSE, 2006).

³³ It was intended for a United States Airforce C-17 to also attend, but it had to pull out due to operational issues (CCC, 2007)



2007 also of course marked the beginning of IPY, which saw the New Zealand Government contribute an additional \$11.1 million over three years to Antarctic research as part of IPY. Locally, University of Canterbury researchers were involved in two significant IPY projects³⁴ (UC, 2007a).

In the leadup to the 2008 Christchurch Antarctic Festival, the profile of Antarctic humanities took a step forward with the inaugural *Imagining Antarctica* conference (early September 2008), hosted by the University of Canterbury in partnership with Massey University and the University of Tasmania. This workshop featured national and international guest writers, and was timed to coincide with the Christchurch Writers' Festival. Focusing on perceptions and representations of Antarctica, the workshop drew on the arts, social sciences, and humanities, which Michelle Rogan-Finnemore, Gateway Antarctica Centre Manager and Conference Convenor, said highlighted 'the multidisciplinary aspects of Antarctic research' (UC, 2007b). This conference will next be hosted in Tasmania in 2010, embracing the Antarctic Treaty principle of international cooperation, and the treaty recognition (Resolution 2, ATCM 2006) that the arts have a role to play in Antarctica.

Thus it was on the heels of *Imagining Antarctica* that the Christchurch Antarctic Festival was held in late September 2008 (Fig. 16). The focus was on heritage and family in light of the continuing IPY, but there was also a heightened prominence given to climate change awareness and international invitational lectures.

³⁴ In IPY, University of Canterbury researchers involved in two significant projects: predicting biocomplexity in the Dry Valleys (with the University of Waikato and Massey University), and Ice CUBE, geared at understanding how the Ross Sea coastal benthic ecosystem will respond to climate change. The New Zealand Government contributed an additional \$11.1 million over three years to Antarctic research as part of IPY (UC, 2007a).

The central city's Cultural Precinct was developed as a key hub of festival activity. This area includes Botanic Gardens, Robert McDougal Art Gallery, Canterbury Museum, Christchurch Art Gallery, Christchurch Tramway, Our City O-Tautahi³⁵, the Scott statue and adjacent area, and Christchurch Cathedral and Warner's Historic Hotel in Cathedral Square. The official opening featured a greater arts presence, with Antarctic-inspired fashion design, live music and multimedia performance, and photographic exhibits. The memorial wreath-laying continued to draw a large, respectful and engaged crowd, while Christ Church Cathedral's memorial service in conjunction with Antarctica New Zealand and the USAP continued its own tradition of marking the start of the summer season on the ice.



Fig. 16. Christchurch Antarctic Festival 2008 programme. Image: CCC.

Engagement with school children increased, through 'Big Bergs', an exhibition created by school children who had studied notable Christchurch Antarcticans in depth, 'Snowball Theatre' featuring films in the Cathedral, and 'Gateway to Basel', where a two-hour live, outdoor videolink next to the Scott statue provided an opportunity for school children to engage with Scott Base wintering staff, presenting musical items and their knowledge of notable Christchurch Antarcticans prior to asking questions about living and working on the ice. The wider public followed up with their own questions.

The family day, now named 'Ice-capade', shifted venue again, this time to the vicinity of the Christchurch International Airport, enabling collaboration between key festival stakeholders, notably the CCC, Christchurch International Airport Ltd (CIAL), USAP, and the Antarctic Attraction, while also involving the US and Royal New Zealand Air Forces and the airport's fire service. Dynamic elements of the family day included free 'Antarctic' face-painting, ice skating (on a synthetic ice rink), children's performance groups, ice carving and crash-response demonstrations with the fire crew's new Rosenbauer CA-5 Panther, and heavily discounted entry to all aspects of the Antarctic Attraction for city

³⁵ Our City O-Tautahi is an exhibition venue with a difference as it works with a community so they can tell their own stories, and then exhibits the outcome. It is a heritage building on the banks of the Avon River, near a statue of Scott, made by his widow Kathleen.

residents. The Hägglund rides and aircraft tours including the USAF C-17 were very popular (Fig. 17).

Feedback from the Ministry of Economic Development's Wayne Morgan, head of Major Events New Zealand, highlighted successes of the 2008 festival as including showcasing the international relationships provided to New Zealand by Antarctica, the breadth of the programme, and the live videolink to Scott Base involving school children prepared with questions.

Thus, from its 2005 origins, the Christchurch Antarctic Festival has developed into a busy, week-long series of events in 2008, engaging a wide area from Port Lyttelton and Ferrymead, to the Cultural Precinct and the Christchurch International Airport precinct. The programme has broadened its celebration of Antarctica from a focus on past history, heritage and tradition, and science, to focus on contemporary issues such as whaling in the Southern Ocean, climate change and current science, with increasing academic and family engagement.

As well as Antarctica, the festival, too, needs to be "Valued, Protected and Understood". Its growth is dependent on further funding, which is contingent upon the rationale for the festival being clearly outlined. That is the subject of the following section, structured around the essence of a festival: that it is a celebration.

Why Celebrate Antarctica? Rationale for the Antarctic Festival: Past, Present and Future

There are many significant cultural, educational and economic reasons for New Zealand to celebrate and showcase its Antarctic connection, for this celebration to take place in Christchurch, and for local and national government to invest in the festival not only as a vehicle for these celebrations, but as an opportunity to leverage from its profiling of national achievement. These reasons, however, justify not only a festival and other events celebrating the past and present, but the establishment of coordinated support for the ongoing development of New Zealand's Antarctic connections: scientific, peaceful and cultural.



Fig. 17. Queues on board the USAF aircraft. Image: Flickr (2009).

Political Rationale: International Relations and New Zealand on the World Stage

New Zealand's Antarctic Political History

New Zealand's political history shows a strong justification for celebration in an Antarctic Festival. New Zealand has a peaceful identity and shows great things can be achieved through collaboration (Johnson, pers. comm.), and has always been a strong supporter of Antarctic Treaty principles (Gilbert, 2003). New Zealand's territorial claim to the Ross Dependency was made by a British Order-in-Council on 30 July 1923. New Zealand's permanent base in the Antarctic was established in 1957 during its participation in the internationally cooperative scientific research programme that was IGY, which led to the negotiation of the 1959 Antarctic Treaty. As one of the 12 original signatories, New Zealand is "a world leader" (Johnson, pers. comm.). New Zealand promptly ratified the treaty by 1 November 1960 (SCAR, 2009), gaining immediate consultative status when the treaty entered into force on 23 June 1961. Consistent with this, New Zealand has also signed subsequent legal agreements which built on the treaty principles, such as CCAMLR³⁶ and the Madrid Protocol³⁷. New Zealand is an active member of both SCAR and COMNAP. New Zealand's active involvement in the Antarctic Treaty System has allowed for the country's views to be heard on international political stages, and for such a small country, the nation has "punch above its weight", having a voice in decision-making affecting 10% of the world's land surface and about 10% of the world's oceans³⁸.

International Relations

Being part of the Antarctic Treaty System has given New Zealand great opportunities to form cooperative relationships with other nations. Fellow original signatory and instigator of the Antarctic Treaty, the United States, has had an enduringly close working relationship with New Zealand since 1955, despite disagreement on certain issues outside the Antarctic sphere. This is a key example of the far-reaching legacy created by the Antarctic Treaty's principles of preserving the continent for the purposes of peace and science, and not ever allowing it to be the subject of international discord.

³⁶ The Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), in force 1982.

³⁷ New Zealand joined the Protocol on Environmental Protection to the Antarctic Treaty by signing it in 1991; while the Protocol entered into force on 14 January 1998, New Zealand had already made it into domestic law in 1994, which came into domestic effect in 1995.

³⁸ The Antarctic Treaty covers the area south of 60° latitude, including all land, sea, ice shelves and islands, excluding areas of the Southern Ocean already covered by laws pertaining to the High Seas.

Through the USAP being based in Christchurch (Fig. 18), central, local government and agency officials have had the opportunity of forming a plethora of strategically important relationships, which can continue to develop over time. These opportunities include the NSF as coordinators of the Polar Research Program, NASA as key researchers in the USAP, the United States Airforce as logistics provider in association with the New Zealand Airforce, Raytheon as the current logistics provider, and US central government officials. As a result of the significance of these relationships, New Zealand has also had the opportunity to host many foreign diplomats and other dignitaries, including royalty and heads of state.



Fig. 18. The USAP has a base at Christchurch International Airport. Image: Flickr (2009)

A further layer of significant international relations is added by the association with the Italian Antarctic Programme (PNRA). Italy ratified the Antarctic Treaty in 1981, and bases a PNRA office in Christchurch owing to it possessing the closest gateway port facilities for the Italian summer-only research base in the Ross Sea region, Terra Nova Bay station.

New Zealand was a key player in turning around Malaysia's stance on the Antarctic Treaty from being for the dissolution of the ATS and establishment of a world park under UN control, to being for the continuation of the ATS, with Malaysia as part of it. There are significant opportunities for New Zealand and Malaysia to develop their relationship, though Malaysia has yet to consolidate its involvement in the ATS, possibly attributable to the departure in 2002 of Prime Minister (and reformed ATS advocate) Mahathir Mohamad, from the political spotlight.

Korea ratified the Antarctic Treaty in 1986 and will bring its new icebreaker through Christchurch in January 2010. New Zealand looks forward to the development of the relationship, with the confidence that incumbent benefits extend both ways.

In summary, these political rationale are of great relevance to New Zealand's central government agencies.

Nation Branding Rationale

New Zealand has a strong identity as a clean, green nation (Hunt & Fairweather, 2006). As an extension of the nation's popular cultural mythology, New Zealand has shown great integrity in voicing its national values. As a world leader in environmental issues, New Zealand hosted an arduous six years of negotiations around how the exploitation of Antarctica's mineral resources, which seemed inevitable at the time, could take place in a way which made the least possible environmental impact. The discovery of the ozone hole and lobbying by environmental groups such as Greenpeace brought environmental issues to the fore and the resultant Convention on the Regulation of Antarctic Mineral Resource Activities (Wellington, 1988) was not signed by two signatories to the treaty, Australia and France. The convention was shortly thereafter superseded by the Madrid Protocol which indefinitely banned mining in Antarctica, establishing it as a "natural reserve devoted to peace and science" and comprehensively protecting the Antarctic environment and its associated ecosystems.

By ratifying the Protocol, which domestically became the Antarctica (Environmental Protection) Act 1994, and making environmental protection an integral part of all Antarctica New Zealand's activities, New Zealand has signalled its commitment to preservation and protection of the environment. New Zealand was the first country to undertake an independent environmental audit of its Antarctic activities, which attracted much international interest (Roper-Gee, 2003).

New Zealand also takes a strong anti-nuclear stance, and identifies strongly with wilderness values, and shows great integrity in bringing these to bear on its international activities.

While New Zealand has historically exploited the "clean and green" aspect of popular cultural mythology, the current national branding strategy is based on the word 'pure', exemplified by the government's key international PR website, www.nzpure.com. The pure branding lends itself extremely well to Antarctic connections, as Antarctica is considered the purest place in the world, the last great wilderness, and, debatably today, 'untouched'.

As an extension of the consideration of branding, in New Zealand's destination marketing the term 'gateway' tends to be used a bit like loose change – thrown around all over the place. Christchurch in particular, is referred to as the Gateway to the South, the Gateway to the Alps, the Gateway to the Alpine Triangle, as well as the Gateway to the Antarctic.

Perhaps this situation should change, especially if the term is to become an intrinsic part of Christchurch and New Zealand's branding relating to the Antarctic connection.

Christchurch could be considered the "Doorstep to the Southern Alps", "Front Porch to the South Island", "Gateway to the Antarctic". Perhaps a regional strategy involving Christchurch and Canterbury Tourism, the Canterbury Development Corporation and the Christchurch City Council along with the stakeholders of the tourism and Antarctic industries is needed, to tidy up associations of the terminology and achieve consistency of message.

Economic Rationale

As one of only a few physical gateways to Antarctica, Christchurch is aware it has a "position as the crucial supply and logistics link to that great Continent" (CCC, 2004). The current infrastructure not only supports the New Zealand National Antarctic Programme (NAP), but also those of the United States (USAP) and Italy (PNRA³⁹). Together these represent approximately 1483 personnel in their national Antarctic bases during the peak summer period, and 35% of peak summer base personnel on the ice⁴⁰. The US maintains the largest presence on the ice (CIA Factbook, 2009).

The New Zealand infrastructure for the NSF USAP operations is based in Christchurch, allowing significant economies of scale from a shared logistics pool, US use of the Christchurch International Airport and Lyttelton Port facilities, collaboration on many research projects, provision of goods and services to the programmes by Canterbury businesses, and the opportunity for the city to host personnel of the USAP. The relationship is very much appreciated by Antarctica New Zealand, and the close relationship is continued on the ice, where McMurdo Station and Scott Base are located on Ross Island, only 3km apart. Altogether, this results in significant economic benefits – not only for the Canterbury region, but for New Zealand. A recent study (Saunders *et al.*, 2007) indicates these benefits are surprisingly greater than was previously thought, and sizeable enough to not be taken for granted.

The report, commissioned by the Canterbury Development Corporation and funded by the Ministry of Economic Development, focussed on five sources of economic benefits: the

³⁹PNRA is the Italian acronym for Programma Nazionale di Ricerche in Antartide.

⁴⁰During the austral summer of 2008, Scott Base peak population was approximately 100. The CIA Factbook gives March 2008 estimates of 90 Italian base personnel (excluding the joint Italian-French base) and 1293 USAP base personnel. The CIA Factbook site estimates peak summer Antarctic base personnel at 4219; this was corrected to 4234 to include the most recent Scott Base peak personnel.

New Zealand, US, and Italian national Antarctic programmes, tourism (most of this is based in Canterbury, though some includes ocean expeditions to the sub-Antarctic Islands and Ross Sea Region), Southern Ocean fishing (which is primarily of the Antarctic toothfish, *Dissostichus spp.*), Antarctic-related education and research based in Canterbury, and activities associated with the protection and restoration of the Ross Sea region's Antarctic Treaty-protected heritage sites. It was found that the National Antarctic Programmes were the largest contributor (\$34.2m), with tourism and fisheries close behind (\$29.1m and \$21.8m, respectively).

Antarctic-related activities were estimated to directly contribute almost \$88 million to the Canterbury economy, and at least \$133 million to the New Zealand economy (Fig. 19), with the real national figure expected to be significantly higher than this estimate, which is based on Canterbury-centric data.

Fig. 19. Estimated contribution of Antarctic-related activities to the local and national economy

	Canterbury	New Zealand
Direct Expenditure	Almost \$88 m	At least \$133 m
Total Expenditure (Direct, Indirect & Induced)	\$155.1 m (conservative)	At least \$282 m
Employment supported	1,256	2,115

All figures in NZD. Direct = direct injection, using sector-supplied data; Indirect = calculated upstream & downstream revenue & employment to service Antarctic-related sector organisations, using standard economic multipliers; Induced = calculated effect of consequential household spending. Source: Saunders *et al.* (2007).

Saunders *et al.* (2007) highlighted the role the Christchurch Antarctic Festival plays in developing and maintaining key relationships within the sector. They also reported the perception of high performance of New Zealand suppliers by national Antarctic programmes, and noted the depth of engagement of these suppliers, in terms of their enthusiasm, enduring interest, embracing of challenge and commitment to growth. It also recommended support for developing air- and sea-port infrastructure, consideration of sector business regulation, further sector analysis, and the establishment of a Christchurch Antarctic Office to facilitate further economic development of this sector.

With respect to the notes raised by this report, additional festival funding is being sought to reinforce development and maintenance of sector relationships, and a feasibility study

into establishing an Antarctic Office has been completed and is now in the final stages of consideration and review. The Christchurch International Airport Ltd. (CIAL) is actively developing the airport's Antarctic identity, while Air New Zealand is developing its capacity to deliver added-value services to national Antarctic programmes. However, further sector analysis is ongoing, and consideration of developing the seaport infrastructure remains to be actioned.

A redevelopment of Christchurch's Lyttelton Port waterfront would present a multifaceted opportunity for long-term benefits. As raised in the Saunders *et al.* (2007) report, the current berth capacity could be upgraded to add value to other national Antarctic programmes and expeditionary vessels, an important demonstration of the city's commitment to infrastructural support of their activities and to developing business opportunities. The port's important historic Antarctic connections could also be profiled in a much more highly visible way, such as through a commanding public artwork, engaging and interactive displays, and inclusion in an historical walkway linking the waterfront with the town's other notable sites of Antarctic interest such as the Lyttelton Museum, as well as its rich historical assets comprising over 300 heritage buildings (Rossie, 2008). Such improvements in the waterfront experience with improved access and enhanced links to the town would present long-term benefits for tourism, including visitors from Christchurch and from visiting cruise ships, and for reinforcing local identity.

In Hobart, the total expenditure of Antarctic-related organisations and groups has been estimated at about \$126m AUD (\$159.5m NZD) (Antarctic Tasmania, 2006). The city has recently undertaken a waterfront redevelopment initiative with the launch in 2006 of what was then the richest design competition in the Southern Hemisphere. The design brief sought a visionary contemporary remodelling of the space to embrace the 'maritime heritage, working port, and cultural heart' aspects of the waterfront (UDF, 2006). This kind of initiative can attract international talent to bear on a site with great potential to connect the past to the future in a way that is beneficial for all stakeholders including the local community.

Evolving Heritage Rationale

New Zealand's Historic Connections: People and Places

The Ross Dependency was originally claimed by the UK in 1923, based on discoveries by Ross (1841), Scott (1902/03; 1910/14) and Shackleton (1907/09; 1914/16), and motivated by the search for new areas of whale stocks. The UK also made territorial claims in the Antarctic Peninsula region, which was considered of greater strategic importance owing to its proximity to the Drake Passage. The Ross Dependency region was subsequently handed over to New Zealand by an official Order-in-Council, so that New Zealand would administer the region, which, at the time, included issuing whaling licence fees (until 1920). Expeditions to the Antarctic have formed real historic links with people and places in New Zealand, from Christchurch and Lyttelton, to Oamaru, Port Chalmers and Dunedin, Invercargill, Bluff and Stewart Island. In fundraising to support the early expeditions, and through the Antarctic Society and settlement of Antarciticans all over New Zealand, the whole country is implicated in the Antarctic connection. Through the Antarctic Heritage Trust and the Canterbury Museum, New Zealand is a world leader in the preservation of Antarctica's "Heroic Era" dwellings and artefacts.

New Zealand's Contemporary Connections: People and Places

New Zealanders have consistently been involved in science and support in Antarctica for over 50 years, since the establishment of its permanent base in 1957. Just about everyone has a story to tell connected in some way to Antarctica. Sir Edmund Hillary, New Zealand's best-known figure, is intrinsically linked with the Antarctic, being Scott Base's first commander, and main protagonist in the legendary race by tractor to the South Pole in 1958. He has been, and continues to be, a role model for generations of New Zealanders, and as well as being perceived as masculine, adventurous, innovative, resourceful, and a winner, he has always maintained his humility and his integrity as a practitioner of environmental protection, humanity, and international cooperation. In this sense he has embodied many of New Zealand's ideals and linked them with the Antarctic.

New Zealand's contemporary links are very Christchurch-centric, as the gateway logistics hub for the national Antarctic programmes of New Zealand, the United States, and Italy, owing to the nation's geographic proximity and the infrastructure offered by the Christchurch International Airport, Lyttelton Port, and the Canterbury Antarctic industry. Relative to the rest of the nation, Christchurch is particularly Antarctic-savvy. "They say Auckland is the capital of Polynesia; likewise, Christchurch is the capital of the ice...the

city's relationship to Antarctica is like Cape Canaveral to the moon" (Vance, Pers. Comm.).

Through connections with "Heroic Era" expeditions, the exploits of Shackleton's incredible navigator Frank Worsley (discussed earlier), Sir Edmund Hillary, and the enduring relationship with the United States, the largest national Antarctic programme presence on the ice, New Zealand's relationship with the Antarctic stands on the shoulders of giants.

New Zealand's Antarctic Arts Legacy

As discussed in the previous section, through Antarctica New Zealand and its partnership with Creative New Zealand, the nation has a growing Antarctic arts legacy. Despite its importance, this body of work is currently decentralised and lacking in impact.

Educational Rationale

Through its educational stakeholders, Gateway Antarctica at the University of Canterbury, and the Antarctic Attraction, the festival is able to provide a vehicle through which they can increase awareness of the product they offer. They are the channels through which many people begin their Antarctic fascination, which is great for developing the next generation of Antarctic scientists. Gateway Antarctica has indicated that approximately half of the students who undertake the Graduate Certificate in Antarctic Studies go on to an Antarctic-related career.

Social Networking Rationale

Festivals are most commonly understood to be a vehicle for celebrating. But as discussed earlier, and as found in the Saunders *et al.* report (2007), the festival also plays a role in reinforcing relationships within the stakeholder community. By extension, the festival can also play a key role in forming relationships. These relationships can cross any sector of the festival audience, with the benefit of shared understanding; people can gain insight into others' perspectives and find new ways of looking at things, sometimes surprising, sometimes very beneficial.

The Big Bergs exhibition and Gateway to Base! are examples from the 2008 Christchurch Antarctic Festival of connections being made between Antarcitans and schoolchildren – the potential Antarcitans of tomorrow. Feedback from participants has been overwhelmingly positive.

A festival programme can create opportunities for people and businesses to network; depending on the event, the participants may have extensive prior knowledge, even experience, of Antarctic issues, but they may have none at all; events can be created which target a particular audience leading to new connections with Antarctica, and new connections with other businesses. The festival can therefore be a powerful catalyst in creating new business opportunities.

The festival can educate. The festival can create family memories. The festival can bridge communities by creating shared memories. The festival can develop city and nation branding. A broad and thoughtfully designed festival should be capable of achieving all these as part of celebrating the many aspects of Antarctica which touch peoples' lives today.

Festival Future: Development of the New Zealand Antarctic Festival

The rationale outlined in the previous section provide a very solid justification for celebration of New Zealand's Antarctic connections through a New Zealand Antarctic Festival, and taking into account the Christchurch Antarctic Festival's credible history of steady growth in events, awareness and attendance, along with solid and committed stakeholders, the festival is very well placed for taking the utmost advantage of additional funding opportunities to grow it further.

The timing of the New Zealand Antarctic Festival is undergoing a review, with proposals to shift the key focus of activities to coincide with WINFLY, the first flights to the ice in August which demarcate the upcoming austral summer season with the passage of personnel and supplies. Added benefits are perceived in the city possessing a stronger Antarctic feel, owing to winter climate.

The mandate from Major Events New Zealand, part of the Ministry of Economic Development, for funding support from all the various central government agencies which are stakeholders in the interests of New Zealand's international geopolitical, regional domestic, and national cultural associations with Antarctica, is critical to the future development of the New Zealand Antarctic Festival. With central support, the New Zealand Antarctic Festival becomes a cultural extension of government strategy, but must at the same time remain independent in terms of preserving the integrity of its relationship with the people whose celebration it is – the Antarcticans, those involved in the Antarctic industry including the international partners, and the people of New Zealand, whose developing national identity Antarctica is a part of. The vision needs to remain locally rooted, but be inclusive of the nation.

Challenges for the New Zealand Antarctic Festival

Engagement

Future challenges for the festival include developing a well-coordinated, strategic approach to the festival, so that it will be able to grow to connect the nation, rather than just the Canterbury region.

The festival will need to bring together all the gateways which enable others to connect with Antarctica: the Antarcticans, Arts, Technology, and the reasons to celebrate embodied in the historic and contemporary, domestic and international connections, which enable family memories to be created and Antarctica to be embedded in the New Zealand culture. Antarctica: Valued, Protected, Understood.

Funding

The festival, too, needs to be valued, protected and understood. Its growth is dependent on further funding, which is contingent upon the rationale for the festival being clearly outlined. That is the subject of the following section, structured around the essence of a festival: that it is a celebration.

Integrity

The future direction of the New Zealand Antarctic Festival is one which carries great responsibility; awareness of current Antarctic issues, avoidance of cultural assumptions, and respect for and sensitivity to, the existing stakeholders in the Antarctic industry is critical. The harshest judges on the festival's integrity will be the Antarcticans, who include the international Antarctic community.

The growing festival programme will always need to resonate with the principles on which the entire ATS is founded. It needs to maintain integrity in its Antarctic and scientific connections, as judged by the Antarcticans and research stakeholders.

Growing Awareness

The festival needs to be a vehicle for growing Antarctic and environmental awareness as a key part of the social change that will be necessary for the nation to apprehend the changing world.

Integrity means different things to the public than the Antarcticans. To the public, integrity requires events to consistently be accessible public reach, maintain currency, quality, and be forward-thinking in its public outreach. For organisers to widely promote only one public event every two years may well fail to convince the rate- and tax-paying public of the sincerity of the local and national governments' stated belief in the values underpinning New Zealand's Antarctic connection, thereby undermine the country's developing Gateway Identity.

To the Antarcticans, emphasis on a carnival-type focus would be lacking in substance. The buy-in of the Antarcticans is essential to the festival's success and relevancy.

A Developing Vision: Opportunities for the New Zealand Antarctic Festival

Central to the festival should be a vision for the role it can play in developing New Zealand's Antarctic Gateway Identity. As outlined in 'Assessing New Zealand's Antarctic Identity', national identity is the popular mythology of an imagined community, defined partly by education, public ceremonies, and mass production of public monuments. Since nations are comprised of individuals, individual identity therefore needs to be central to the vision, growing from the strongest possible sociocultural context (this is Christchurch as the gateway city). As discussed, individual identity is shaped partly by a sense of continuity, affiliation and uniqueness from others.

The ways in which national Antarctic identity can be achieved, by focusing on supporting the development of individual Antarctic identity, is then the context in which a vision for the New Zealand Antarctic Festival will be elaborated. In every example, the arts and technology can interface as gateways.

It should be noted that holding a festival alone will not be enough; key developments alongside the festival will also be necessary in order for Antarctica to become "embedded in the New Zealand culture.

Developing Affinity Through New Events, New Audiences

Arts Audience

There is a fantastic opportunity for the festival to be a vehicle for the centralisation of New Zealand's growing Antarctic arts legacy. This is necessary in order for its significance to be apprehended. In the festival context, this can be achieved through websites, publications,

artist talks, exhibitions, installations and performances. The festival is also an opportunity to develop the city's connections with other gateway cities in Australia, South America and South Africa, by showcasing their arts to New Zealand's audiences. This is in line with the Antarctic Treaty principle of international cooperation.

Youth Audience

Affinity is also achieved through creating positive memories. Research indicates that the festival is not well-attended by some age groups

However there also needs to be a youth focus. The culture on "The Ice" is replete with unique celebrations, some of which could translate very well to a relevant gateway city. An example of this is Icestock, the New Years' celebrations held at McMurdo Station. The timing of a Christchurch Icestock for WINFLY would be a great opportunity for a midwinter outdoor party without overbearing Antarctic connections, while also being a nod to the American Antarctic culture from which the event would take its name. It could be a vehicle for celebrating the US connection, featuring top American and New Zealand bands, with a live link to Scott Base and McMurdo Station. It would be hoped that the US could participate, but it is acknowledged that this is a very busy time of year for the USAP and their contractor.

Business Audience

Creative ways to engage businesses in an Antarctic Festival do exist. The ways in which business can relate to Antarctica are through management; the logistics and team leadership involved in Antarctic travel, from the early explorers through to today's modern national Antarctic programmes, are highly illustrative accounts of management achievement. The subject is accessible for the business audience as a microcosm of management styles, human magnificence and human frailty.

Robert Headland, archivist of the Scott Polar Research Institute in Cambridge, said "Team leadership and management are key themes in the present day...Shackleton embodies the finest points of both, and as such is an ideal role model" (Crace, 2001). As part of an Antarctic conference, events should include some around exercises and speakers which explore and illustrate the triumphs and failings of the classic management styles of the Antarctic.

Education and Outreach

In line with the new emphasis on education and outreach set by IPY, this should be a significant component of the festival. *The New Cool* as a flagship for encouraging the next generation of Antarctic scientists will be a tough challenge as currently there is no 'cool' factor in science.

ICEHOUSE: The New Zealand International Youth Science Centre

Establishing an ICEHOUSE, or *New Zealand International Youth Science Centre* in Christchurch, targeted at teenagers and advanced primary learners, could achieve this objective if it were to serve as a hub for youth science and technology through an integrated, holistic approach to youth culture, involving appropriate opportunities for social networking, mentoring, educational opportunities, fun innovation challenges with serious incentives, interfacing with the arts and human relations, polar travel opportunities, international exchanges with students from other Antarctic Gateway countries and the countries whose national Antarctic programmes New Zealand hosts.

Such a centre could be seen as an in-between step from the concept of Science Alive! to the multi-disciplinary Antarctic education coordinated by Gateway Antarctica. It could provide a safe, fully mentored learning environment for exciting science experiments and featuring the latest technology. Key challenges would be for it to dissociate from the stereotypical turnoffs associated with science, such as social discomfort, dingy and dull laboratories, uncomfortable chairs and lab glasses, starchy labcoats, and the traditional approach to student behaviour in which students are made to feel they should sit still and keep quiet. In contrast, it should be as interactive as possible.

Engaging educators relatively close to their own age, such as university graduates, would be a novel way to make science feel more relevant. As part of an holistic approach to intelligent living, it would be desirable that access to exciting, healthy food would be easier than access to junk food, which would require some forethought into how prices could be kept down.

The competition organised by APECS New Zealand in 2006, which offered exciting prizes of travel to Antarctica and sponsored Antarctic tertiary education for outstanding entries comprising creative/innovative ways to teach their peers about Antarctica was a fantastic idea. This concept could find its legacy through implementation as part of the programme at such a youth science centre, and it would be tremendously satisfying for the students if the Ministry of Education would consider integrating the top entries into the secondary

education system. Certainly the winners of the APECS New Zealand competition were highly innovative approaches to Antarctic education.

Since so many NASA personnel pass through Christchurch as part of the USAP activities out of McMurdo, it would be worthwhile to pursue ways in which an enduring NASA-NZ relationship could develop, perhaps with the establishment of a southern NASA outpost. The association of NASA with the New Zealand International Youth Science Centre proposed above would lend it tremendous scientific prestige; NASA may even be able to contribute tutor expertise to the activities.

A US centre for youth education excellence, which interfaces with the USAP, is San Francisco's Exploratorium: the museum of science, art and human perception,⁴¹ which is special for its "insistence on excellence, a knack for finding new ways of looking at things, a lack of pretentiousness, and a respect for invention and play". It was conceived from the "Library of Experiments" Oppenheimer developed while holding a post at the University of Colorado, and developed through his studies of European museums. The Exploratorium focuses on exhibit-based learning, in a similar way in which Christchurch's Science Alive! does. Through collaboration with Science Alive! and the Exploratorium's Ex-NET teaching network, the *New Zealand International Youth Science Centre* could achieve true education excellence while targeting the older age group.

New Zealanders are known for their innovation, harking back to the days of Rutherford, Godward⁴², Bert Munro and John Britten. Apart from the exhibition talent at Science Alive!, there is a rather rich innovation culture asset in people who make it a focus of their life to put things together in new ways.

⁴¹ The Exploratorium was founded in 1969 by Frank Oppenheimer. This is the organisation which founded the NSF-funded web-based programme called Ice Stories: Dispatches from Polar Scientists, discussed in the technology section earlier in this report.

⁴² Dunedinite Ernest Godward was a leading world expert on the internal combustion engine during the 1930s, and one of his many inventions was the spiral hairpin; Samuel Clemens (aka Mark Twain) became vice-president in Godward's company.

Recent figures would include John Potts from Arrowtown, whose inventions focus on bicycles (Fig. 20) and Blair Somerville from the Catlins, who creates “automata”. Perhaps they would be interested in creating exhibits-based science learning for teenagers?



Fig. 20 (L) Johnny Pott’s double-decker bicycle at Go By Bike Day in Dunedin. Image: Stephen Jaquiere, © ODT Online 2008. (R) Blair Somerville in his Leyland Bus. © 3News 2009.

Continuity In The Festival

Continuing the tradition of the Ice-Capade Family Day at the airport’s Antarctic precinct is an excellent starting point. Some Antarcticans feel that the current festival’s emphasis on machinery and technology does not capture the ‘feel’ of the Antarctic (Harrowfield, 2009).

Continuity Of Celebrations

Continuity can be achieved through greater visibility and regular Antarctic celebrations. A once-every-two-years approach to events relating to Antarctica will not be sufficient. It could signal a lack of commitment and/or belief in the validity and importance of the Antarctic connection.

Continuity Beyond The Festival

Although a significant number of New Zealand artists have now travelled to the Antarctic through Antarctica New Zealand, the link between New Zealand, and in particular, Christchurch, as a Gateway to the Antarctic, and the growing body of New Zealand Antarctic arts is not a visible one. The invisibility presents a barrier to growing awareness of its existence, and fails to show that the dominance of science over all things Antarctic is being redressed. Therefore, permanent signals of the arts connection between New Zealand and the Antarctic are needed.

There are several ways in which this could be achieved. In Christchurch, the city, and in particular its corporate community, needs to embrace the opportunity to commission major public works from Kiwi Antarctic artists, for installation at three key sites: the airport, central city, and Lyttelton Port. The festival would be an ideal platform from which to leverage the commissioning and installation. On a smaller scale, Wellington has a delightful public monument in its Karori Cemetery, where Shackleton's carpenter Harry McNeish is buried. McNeish's grave features a life-size bronze tribute to his beloved cat, Mrs Chippy⁴³. The statue was commissioned by the New Zealand Antarctic Society and installed in 2004; it is now an Antarctic tourist attraction.

I note also, the rather empty nature of the "Sculpture Garden" in front of the Christchurch Art Gallery. This could be developed as an Antarctic Sculpture Garden.

Antarctic art could also be integrated into the city's most visible artwork: the front cover of the Telecom White Pages. As the telecommunications supplier to New Zealand's national Antarctic programme, including Scott Base, Telecom may respond positively to a proposal to feature an Antarctic work to celebrate its connection to Antarctica and the country's first national Antarctic Festival. If the public felt supportive of this, who knows how this might grow – perhaps into a White Pages cover every second year?

Centenaries

There are several centenaries coming up – Scott's Expedition of 1910-13 and Mawson's Expedition of 1911-14, then Shackleton 1914-17. With Ponting as photographer, Scott's Expedition marks the start of polar photography as an art form; it also represents "The Worst Journey in the World" (Cherry-Garrard) and Scott's loss of the race to the pole, to Amundsen, and the loss of all five men from the Polar Party on the return journey. Both admiration and debate are inspired by the heroism and tragedy embodied in these tales (Crace, 2001). In light of these centenaries, it would be apt for the festival to feature engaging speakers on the subject, such as writer and Antarctic Sara Wheeler, author of the popular "Terra Incognita" on her travels in Antarctica, and "Cherry", her biography of Apsley Cherry-Garrard, a member of Scott's party and author of the legendary "The Worst Journey in the World".

⁴³ Mrs Chippy went to the Antarctic with the Imperial Trans-Antarctic Expedition (1914-17) and was shot by Shackleton after the *Endurance* became trapped in pack ice, something which McNeish could never forgive.

Appendix 1: Artists to Antarctica

Antarctica New Zealand

	<u>Arts Fellowship (Residency)</u>	<u>Invited Artist Programme</u>
<i>Visual Arts</i>		
70 & 74		Maurice Conly (RNZAF Official Artist)
81/82		Austen Deans (Artist)
89/90		Jonathan White (Artist)
90's		John Hamilton (Artist)
97/98	Nigel Brown (Artist)	
98/99	Margaret Elliot (Artist)	
99/00	Virginia King (Sculptor)	
00/01	Raewyn Atkinson (Ceramicist)	
01/02	Denise Copland (Printmaker)	
01/02	Richard Thompson (Artist)	
02/03	Fieke Neuman (Fashion/Wearable Arts Designer)	
03/04		Grahame Sydney (Artist)
04/05	David Trubridge (Furniture-Maker/Designer)	
04/05	Kirsten Haydon (Jeweller)	
04/05	Kathryn Madill (Artist) (Joint Arts Fellow)	
04/05		Dick Frizzell (Painter/printmaker)
06/07	Clare Plug (Textile artist)	
06/07		Neil Dawson (Sculptor)
07/08	Ronnie van Hout (Artist)	
07/08		John Walsh (Artist)
<i>Authors / Writers / Journalists</i>		
97/98		Bill Manhire (Poet)
97/98	Chris Orsman (Poet)	
98/99	Margaret Mahy (Children's Author)	
03/04	Laurence Fearnley (Writer)	

04/05	Bernadette Hall (Poet) (Joint Arts Fellow)	
07/08	Tessa Duder (Writer)	
08/09		Lloyd Jones (Writer)

Photographers

90		Kim Westerskov (Artist / Scientist)
00/01		Craig Potton
01/02	Anne Noble	
03/04		Andris Apse (Hon. Arts Fellow)
05/06	Megan Jenkinson	
06/07	Joyce Campbell	
08/09		Boyd Webb

TV & Documentaries

06/07		Marcus Lush
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Sound Recordists / Musicians / Composers

99/00	Chris Cree Brown (Composer)	
02/03	Phil Dadson (Intermedia/Sound Artist)	
03/04	Patrick Shepherd (Composer/Teacher) (Honorary Arts Fellow)	
05/06	Gareth Farr	

Choreographers

00/01	Bronwyn Judge	
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The Hollow Men (2008) Written/Directed by Alister Barry, based on the book by Nicky Hager. Community Media Trust, 98 mins.

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